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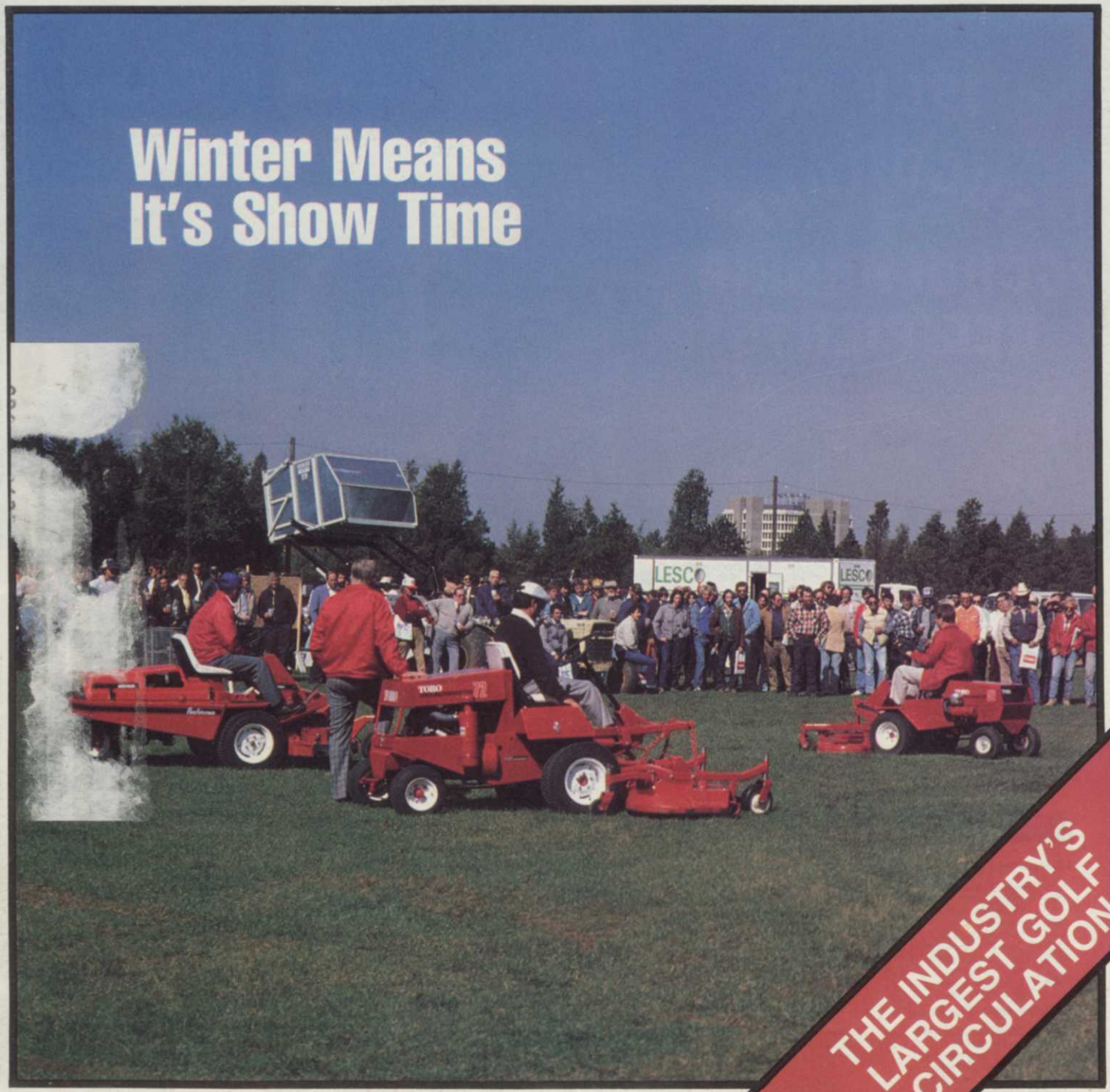
WEEDS TREES & TURF

The Professional Journal of Landscape Design, Construction and Care Since 1962

Poa annua Control in Overseeded Ryegrass

Native Shrubs Provide Low Maintenance Landscape

1981 Interior Landscape Winners



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1977-78 Dean Kent Mosdell
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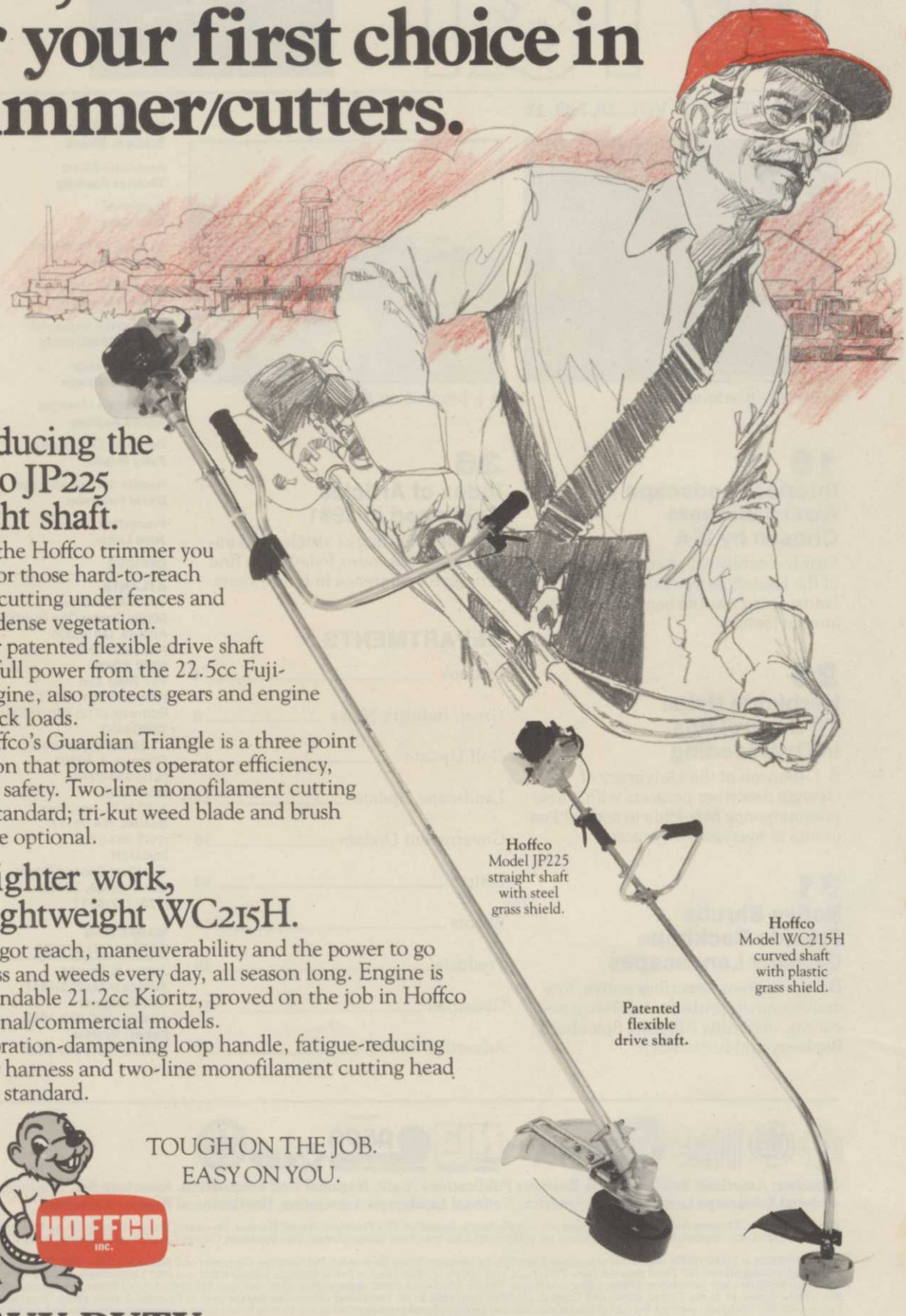

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WT&T

Cover: Mower demonstrations during the New Jersey Turfgrass Field Day in October.

DECEMBER 1981/VOL. 20, NO. 12

Isadora's interiorscape

B. J. Johnson on Prograss

18
Interior Landscape Award Winners Chosen by IPA

Firmly established as an important part of the landscape market, interior landscaping awards become a regular annual feature.

26
Herbicide Helps To Control Poa In Overseeding

B. J. Johnson of the University of Georgia describes progress with a new preemergence herbicide to control Poa annua in overseeded ryegrass.

31
Native Shrubs Provide Backbone Of Many Landscapes

Doug Chapman describes native, low maintenance shrubs for hardiness and variety, including Allspice, Spicebush, Bayberry and Snowberry.

36
Index of Articles Published in 1981

The annual listing of articles and authors. Use this index to help you find articles for reference in future years.

DEPARTMENTS

Outlook ____ 4
Green Industry News ____ 6
Golf Update ____ 12
Landscape Update ____ 14
Government Update ____ 16
Letters ____ 40
Events ____ 44
Products ____ 48
Classified ____ 57
Advertiser Index ____ 60

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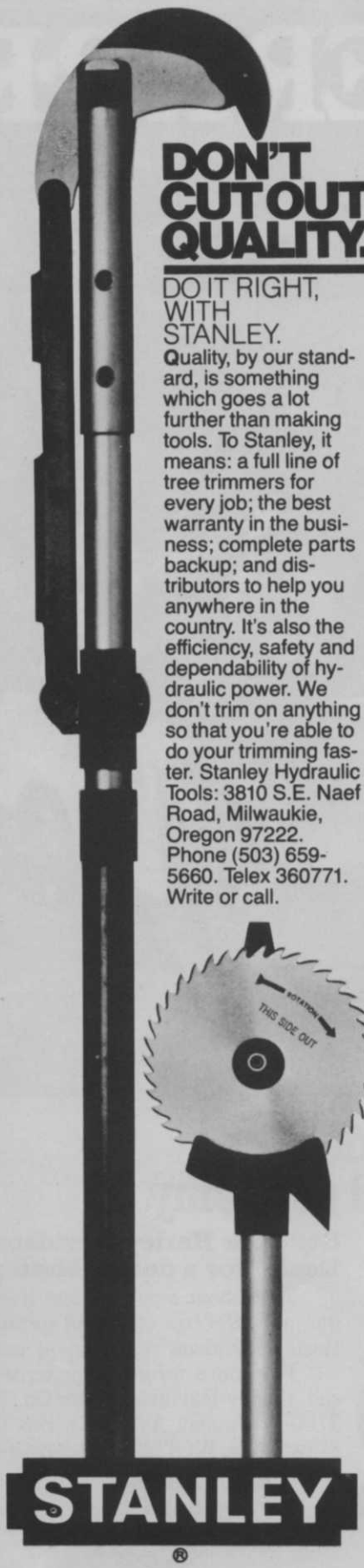

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WT&T

OUTLOOK

By Bruce F. Shank, Executive Editor

Residential construction is a moving target

Many facets of the Green Industry depend upon the residential construction market. Tight money is causing an acceleration of changes in this business sector. The landscape industry must accelerate its changes to keep up.

Residential construction starts are down severely while apartment conversions are way up. Condo or coop living is gaining acceptance. The young, home-owning family is disappearing in the suburbs as is construction of small, single family homes. The big homes are being built at a conservative pace.

First time home buyers are getting older and are in higher income brackets. Nevertheless, due to high mortgage payments, they have no more disposable income than younger couples of five years ago.

Many families are asking if a single family residence is worth the money and effort to maintain. They have a better selection of condominiums to choose from, where they can avoid yard care worries.

Of course, the harder you work for something, the better you take care of it. Those that struggle and succeed in breaking the new home barrier are more careful and more interested in their property. They won't jeopardize the value of their home with a cheap landscape.

For this reason, the willingness of a homeowner to call a professional landscaper is greater. They want the job done properly. If they don't enjoy the landscape, it is at least insurance for property values.

Contractors should realize their residential customer is older, wiser, and probably more concerned about the landscape. They want to know more than the garden center can provide. They know good things are more expensive.

The landscape nurserymen, the original landscape contractor, no longer has the time to assist a customer design his landscape and select the proper plant material. The large garden center has let service slip to keep up with the volume demand of mass merchandising. Too often, there is only one knowledgeable person to answer the questions of tens of customers. That is insufficient to answer the questions of new homeowners who want to make sure they are not buying a mistake.

Garden centers must make a better effort to educate by wall displays, brochures, and knowledgeable sales people. If they do not, the homeowner will pay the landscape contractor to do the job correctly.

The landscape contractor must also allow time to answer customer questions. Work with homeowers who must phase landscaping. Stress that plant varieties commonly found in mass merchandising establishments have weaknessess not found in improved varieties. Excite them with your designs and earn their dependence with quality installation.

Part of the success of the lawn care market is the professionalism of its marketing material. Simple doorhangers don't work anymore. It takes colorful, educational, and impressive literature to get the attention of today's homeowner. They require more of your time to explain things. Price ironically is less a factor than quality. They need to see that the landscaper knows horticulture and design.

The residential property owner is changing. It's time to change our methods of reaching him or her.

This winter is a critical time to evaluate your promotional literature for residential sales. Get professional advise yourself from a small, local advertising agency. If you are near a college with an advertising program, approach instructors. Printers can help for small jobs and may have a graphic artist.

Experts are now setting mid-82 for recovery of housing and real estate. If this works out, demand will be extremely high next summer and fall. Some predict a boom in housing of unprecedented porportions. Don't sell construction equipment yet. You are going to need it before the end of 82. **WTT**

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GREEN INDUSTRY NEWS

Winter Marks Beginning of Show Season

Rutgers Field Day had both good weather and attendance in October.

As the cool weather began to roll into the various parts of the United States, three well-attended turf shows in such diverse areas as New Jersey, California and Florida marked the beginning of show season.

More than 600 turf managers attended the **New Jersey Turfgrass Field Day** at Rutgers Stadium in October. **Dr. Henry Indyk** led demonstrations of athletic field care and renovation while distributors displayed their equipment on the nearby golf course.

Seed, chemical and equipment distributors were able to show their wares, describe them, and clear up confusion as to shortages for the coming year. Equipment distributors showed their new models for 1982. Show attendants were able to try out all models for themselves if they chose.

There was considerable discussion of shortages of Dacthal and possible substitutes, especially in fertilizer mixtures. Seed and chemical company technical representatives were there to explain management techniques and product performance.

The field day precedes the New Jersey Turf Expo in Cherry Hill by two months, so those who were introduced to products at the field day can get final answers at the Expo on December 7-10. It is a system that New Jersey turf managers appear to like and support.

California

"Well planned, superbly conducted; informative and fulfilling" were some of the comments of the 185 industry personnel who attended the **University of California Turfgrass Field Day** at the South Coast Field Station, Santa Ana, CA.

Highlighting the latest research information were farm advisors John Van Dam and Mike Henry, turfgrass specialist Dr. Victor Gibeault, plant

Continues on page 12

John Van Dam (second from left) discusses cool season cultivars with industry leaders at the University of California Turfgrass Field, South Coast Field Station, Santa Ana, CA.

PENNEAGLE Creeping Bentgrass

The grass that re-greened Butler National

A devastating grass disease virtually destroyed the greens at Butler National Golf Club, Oak Brook, Illinois, home of the *Western Open*, shortly before the 1980 tournament. The Butler Board of Directors decided to replace the grass on all greens and after viewing several varieties of bentgrass in the Chicago area, they selected Penneagle Creeping Bentgrass for the restoration program.

Dr. Joseph M. Duich, professor of Turf Science, Penn State University, and developer of Penneagle bent was called in as a consultant. Working closely with Oscar Miles, Course Superintendent, the reseeding of Butler National was begun in mid-August 1980. Before the project was completed, the entire course was seeded to Penneagle Bentgrass.

By November the course was pronounced in excellent condition and by the 1981 Western Open the course drew raves from players and spectators alike.

The TEE-2-GREEN CORP., marketers of Penneagle and Penncross bentgrass has published a booklet complete with photos of the Butler restoration program. The step by step program at Butler is available free of charge.

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YTP JOB NUMBER 4769

Monday, February 1, 1982 | 2 Big Issues | Wednesday, February 3, 1982

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from Weeds, Trees & Turf (incorporating Golf Business)

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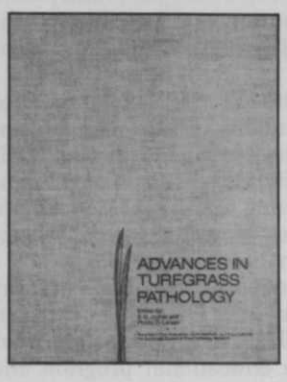

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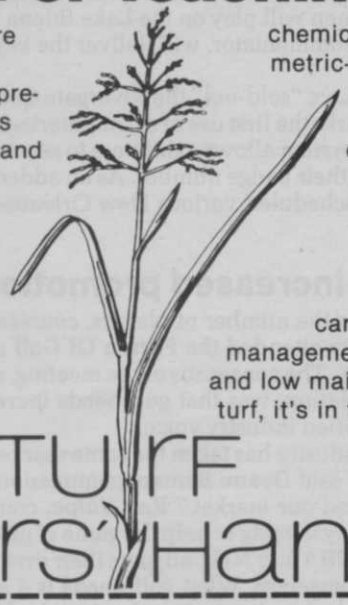
The book contains 150 illustrations and 96 color photographs. Data includes 240 tables and forms. Included are specifications for rootzones, employment, calculations for chemical applications, and extensive metric-imperial conversion. Business and technical aspects of turfgrass management are covered in this 424-page book. Planning, purchasing, hiring, construction, and plant selection are put together for easy on-the-job reference. Markets covered include lawn care, sod production, golf course management, cemeteries, athletic fields, and low maintenance areas. If it concerns turf, it's in the Turf Managers' Handbook.



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GOLF UPDATE

Prusa is new GCSAA education director

Jim Prusa, superintendent of buildings and grounds and acting general manager of Pasatiempo Country Club in Santa Cruz, California, has been named to the position of Educational Director of the Golf Course Superintendents Association of America to replace Palmer Maples who left in June. Prusa's father is superintendent of Aquamarine Golf Course in Avon Lake, Ohio.

After a stint in the Navy, Jim attended Orange Coast Community College in Costa Mesa and California State Polytechnic Institute in Pomona. He was Kent Kurtz's turf technican at Cal Poly and was awarded the GCSAA student scholarship in 1973. He was also president of the Cal Poly Horticultural Alumni Association.

Prusa first served as superintendent to China Lake Golf Course and then moved to Pasatiempo. He is currently working on an MBA under a scholarship from the Club Management Association at the University of Santa Clara.

Attendance record for 1982 GCSAA Show

With nearly 8000 attendees already registered, the **Golf Course Superintendent Association of America's 53 International Turfgrass Conference and Show** in New Orleans (January 28-February 5) is set for a record turnout.

"Managing Change, with GCSAA at the helm," is the theme of the show. Along those lines, the educational program has been bolstered. Six preconference seminars are scheduled for Saturday and Sunday. Optional examinations with points towards certification renewal will be offered. A water symposium is scheduled for Monday and Tuesday afternoon, while the USGA Green Section's educational program will be held on Wednesday. GCSAA's educational program will wrap up with a full day of seminars on Thursday.

The 1982 GCSAA Golf Championships will be held January 28-29 at Walt Disney World in Orlando, FL. The men will compete on the Palm and Magnolia courses and the women will play on the Lake Buena Vista links. Jim McKay, ABC TV sports commentator, will deliver the keynote address to kick off the show.

Over 200 exhibiting companies have "sold-out" the Rivergate Convention Center. The 1982 show also marks the first use of a computerized registration and inquiry system. This system allows exhibitors to send additional information to attendees via their badge number. As an added service to its members, GCSAA has scheduled various New Orleans-style social events during show week.

Golf leaders agree to increased promotion

In an effort to stem the decrease in the number of players, courses, and rounds of golf, 142 industry leaders attended the **Forum Of Golf** at the Amfac Hotel and Resort, Dallas, TX. The consensus of the meeting, sponsored by the **National Golf Foundation,** was that golf needs increased marketing and promotion via a unified industry voice.

"Over the last 20 years the golf industry has taken the same market and cut it up—at each other expense," said **Deane Beman,** commissioner of the PGA Tour. "We need to expand our market." **Ray Volpe,** commissioner of the LPGA, said, "If anybody is going to help the game of golf, it is the people in this room. The NFL, NBA and NHL all have their own marketing departments to promote themselves. What golf needs is a single voice, a coordinating action point. I believe that the National Golf Foundation should be that voice."

The forum was attended by representatives from nearly every major golf organization and related manufacturing companies. NGF added the Club Managers Association, American Society of Golf Course Architects, Touring Professionals Association, Golf Course Superintendents Association of America, Professional Golfers Association and Ladies Professional Golfers Association to its board of governors.

breeder Victor Younger and field station technician Stanley Spaulding. Attendees came away from the event with many new concepts, sound practical information and progress of the Western Regional Cultivar Testing Program.

Faced with the possibility of reduced water availability within five years, the thrust of the University of California research effort has been on developing and evaluating turfgrasses with potential for greater water use efficiency than present day cultivars.

At the **Central California Turf Day** held in San Luis Obispo in Veterans Memorial Hall over 160 people took part in the educational program and equipment displays. The program was coordinated by **Dr. Tim Gaskin,** professor of turfgrass management at California Polytechnic State University, San Luis Obispo.

The featured speakers included Drs. George Schmitz and Kent Kurtz and turf student Raymond Layland, Cal Poly, Pomona; Wayne Morgan, Kellogg Supply Co., Los Angeles; Dr. Howard Ohr. University of California, Riverside; Dr. John Harris, Cal Poly, San Luis Obispo; and Robert Lilley, San Luis Obispo agricultural inspector. One of the highlights of the conference was the Mow Olympics. This consisted of a written test on principles of mowers and mowing equipment and an obstacle course set up on a large lawn area on the Cal Poly campus. The event was won by Michael Stallings, Grover City Recreation and Parks Department.

Florida

The **29th Florida Turf-Grass Association Conference and Show** held at the Sheraton Twin Towers in Orlando was a rousing success with over 900 people attending. The show also posted a record number of exhibitor booths with 130.

While no outdoor exhibits or demonstrations were held, attendees were enthusiastic about the revamped educational program. An extended session on water management was held the first day while the second day of the show gave way to nine 20-minute presentations in both the commercial turf and home lawn areas. The audience, largely consisting of golf course superintendents and students, was very attentive, eager to hear what kernels of information the speakers had to impart. Sessions on topdressing, irrigation, golf care maintenance and golf course design proved particularly enlightening.

The 1982 show is set for October 3-6 and will return to Tampa.

Continues on page 47

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LANDSCAPE UPDATE

PLCAA adds insurance to its services

The Board of Directors of the Professional Lawn Care Association of America approved the implementation of a casualty insurance program which can save members 10 to 30 percent compared to existing rates.

The insurance program will also help the lawn care industry develop a credible data base of premium and loss information to gain more favorable treatment from underwriters. Improved data could add 25 percent to the savings.

Marsh and McLennan, Inc., will administer the program for the PLCAA. Members may apply directly to M&M, 222 S. Riverside Plaza, Chicago, IL, 60606, or through their present insurance broker. Membership information can be obtained by contacting PLCAA, Suite 1717, 435 N. Michigan Ave., Chicago, IL, 60611.

PLCAA has already instituted safety engineering and loss control training for members. Douglas Baker is head of the Insurance Committee for PLCAA.

Interior landscape meetings draw near 1,000

Nearly 1,000 business persons registered for the ALCA Interior Landscape Conference in Atlanta in September and the Interior Plantscape Association Conference in St. Paul in October.

Both conferences covered business matters heavily to help the relatively young industry survive a recession. Technical subjects were also covered to update the interior landscapers on tissue culture, equipment, soils, and lighting.

The IPA conference was almost three times as large as the ALCA conference and some persons attended both meetings. The IPA meeting also offered the certification examinations for the first time. Chicago's Gerry Leider, one of the oldest and largest interior landscapers with his Tropical Plant Rentals, gave the keynote address at the IPA show. His topic was Success in the 80's. Many interior landscape contractors presented their view of the profession during the conference. Scientists from five universities updated horticultural techniques.

Rod Bailey, president of Evergreen Services in Seattle, WA, gave the keynote address at the ALCA conference. A unique suppliers night gave industry manufacturers and growers a chance to discuss new products with the group. Acclimitization, certification preparation, and the introduction of a new publication "Plants for Interior Landscaping" highlighted the three-day program.

Landscape clinic set for Galt House

The annual Landscape and Garden Center Clinic sponsored by the National Landscape Association and the Garden Centers of America is ready to go February 7-10 at the Galt House in Louisville, KY. L.C. Chadwick leads a distinguished group of speakers for the clinic. Interested persons should contact NLA, 230 Southern Bldg., Washington, D.C. 20005, (202) 737-4060.

LA magazine annnounces consumer edition

Jeff Gatewood, general manager of *Landscape Architecture* magazine, recently announced future publication of a consumer landscape architecture magazine. To be titled either *Garden Design* or *Domain*, the magazine will come out four times per year and have newsstand distribution.

Landscape Architecture magazine, published by the American Society of Landscape Architects, has sold certain issues at newsstands as an experiment. Success led Gatewood to suggest a separate publication for consumers. For more information contact *Landscape Architecture*, 1190 East Broadway, Louisville, KY 40204.

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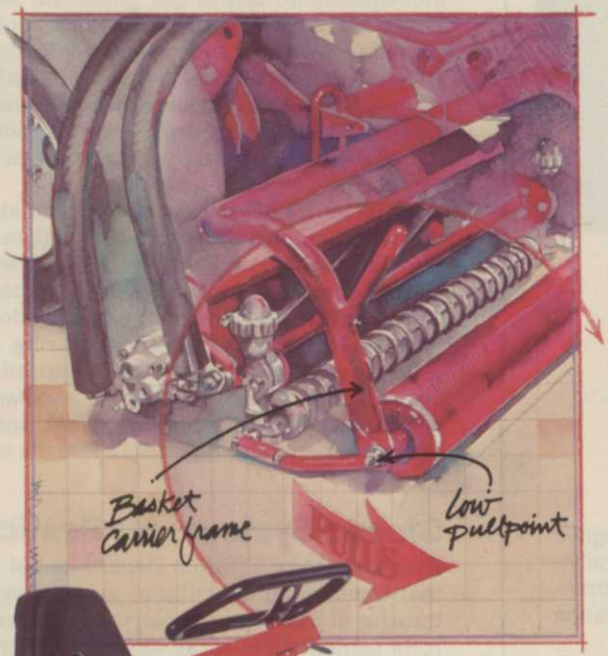

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GOVERNMENT UPDATE

MH Pesticides Suspended

In September the Environmental Protection Agency took action to suspend the registrations of pesticide products containing either the diethanolamine salt or the potassium salt of maleic hydrazide (MH). While MH is principally used to prevent tobacco suckering or harvest sprouting of onions and potatoes, it is also registered for use as a plant growth regulator on turfgrasses, ornamental hedges, and trees. It is especially useful in areas that are difficult to maintain such as along rights-of-ways, highways, industrial areas, airport properties and golf course roughs. We now have only those products which are now in the distribution chain.

When an RPAR review of MH, initiated in October 1977, indicated that additional chronic toxicological data was necessary to estimate the extent of risk caused by its use, EPA asked the registrants to supply such information. The Agency received no commitments for the studies required for the diethanolamine formulations and only one for the potassium salt for control of tobacco suckering. Accordingly, EPA has no other option than suspending the MH registrations. Under the suspension action, which became effective 30 days after the receipt of the EPA notice, registrants could only package, label, and release for shipment maleic hydrazide products produced before the effective date of the suspension.

Closed Systems for Pesticides Questioned

Ever since the California Department of Food and Agriculture required that commercial agricultural applicators use closed liquid systems for transfer of chemicals displaying the signal word DANGER on the label from containers to spray apparatus, there has been concern about the need for such a system. The controversy heated up further when EPA considered the use of closed system transfer as a requirement for the continuation of the registration of the emulsifiable concentrate of diallate, a pre-emergent herbicide.

Hand pouring has long been suspected as being the most hazardous activity involving the handling of highly toxic pesticides and the closed system transfer has been found by researchers in California to reduce this risk significantly. Diallate field studies by the producer, Monsanto Chemical Co., indicated an exposure reduction of 89% when closed system and protective clothing was compared to open system and protective clothing. However, the company also found that a similar reduction could be obtained by using rubber gloves and goggles and following label instructions explicitly. This information was presented at a Workshop on Closed System for Diallate in September, 1981 in Fargo, ND as were many of the disadvantages of the closed system. These included: lack of uniformity of containers and openings, large number of transfer systems but little standardization of pumps, pipes, motors, etc., the cost of the system, the time needed to activate a complex, closed system, and maintenance costs of the system. The Workshop conclusion was that closed systems have great promise but there must be considerable more experimentation before finding ones acceptable to the users, chemical and container manufacturers and the EPA.

Turfgrass Variety Protection

In December 1970, the U.S. Plant Variety Protection Act was enacted to encourage the development of novel varieties of seed-reproduced plants ranging from farm crops to flowers and to make them available to the public, providing protection of those who breed, develop, or discover them.

In the first nine months of 1981, certificates were issued to the Kentucky bluegrass varieties America, Apart and Eclipse; the hard fescue, Silvana; the tall fescue, Rebel; the perennial rye, Barvy; the red clover, Tristan; and the creeping foxtail, Retain.

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A cool, placid place for tired Dallas discoers to rest, Isadoras Disco bar.

THE OTHER HALF:

AWARD WINNING INTERIOR LANDSCAPES

by BRUCE F. SHANK, executive editor

Two floors of diners view this tiered display of Jardines in Cos Cob, CN.

Some landscape business opportunities show great promise only to flicker and die. The interior landscaping profession has survived the speculation stage as it enters its second decade with association representation and recognition.

A few of the 1981 interior landscape projects were recently honored by the Interior Plantscape Association. Since we publish the exterior landscape award winners, we thought the time was right to recognize the interior winners.

Organizations have helped the interior landscape industry develop a solid reputation with building planners and architects. The Society of American Florists cooperating with the foliage growers in Florida developed the first training programs for interior landscape design, installation and maintenance. The rapidly growing market, bolstered by foliage producers in the South, wanted more than SAF was willing to provide and sought assistance from the Associated Landscape Contractors of America and created the Interior Plantscape Association. All three groups continue to serve the market. ALCA and IPA cooperate on a

Continues on page 22

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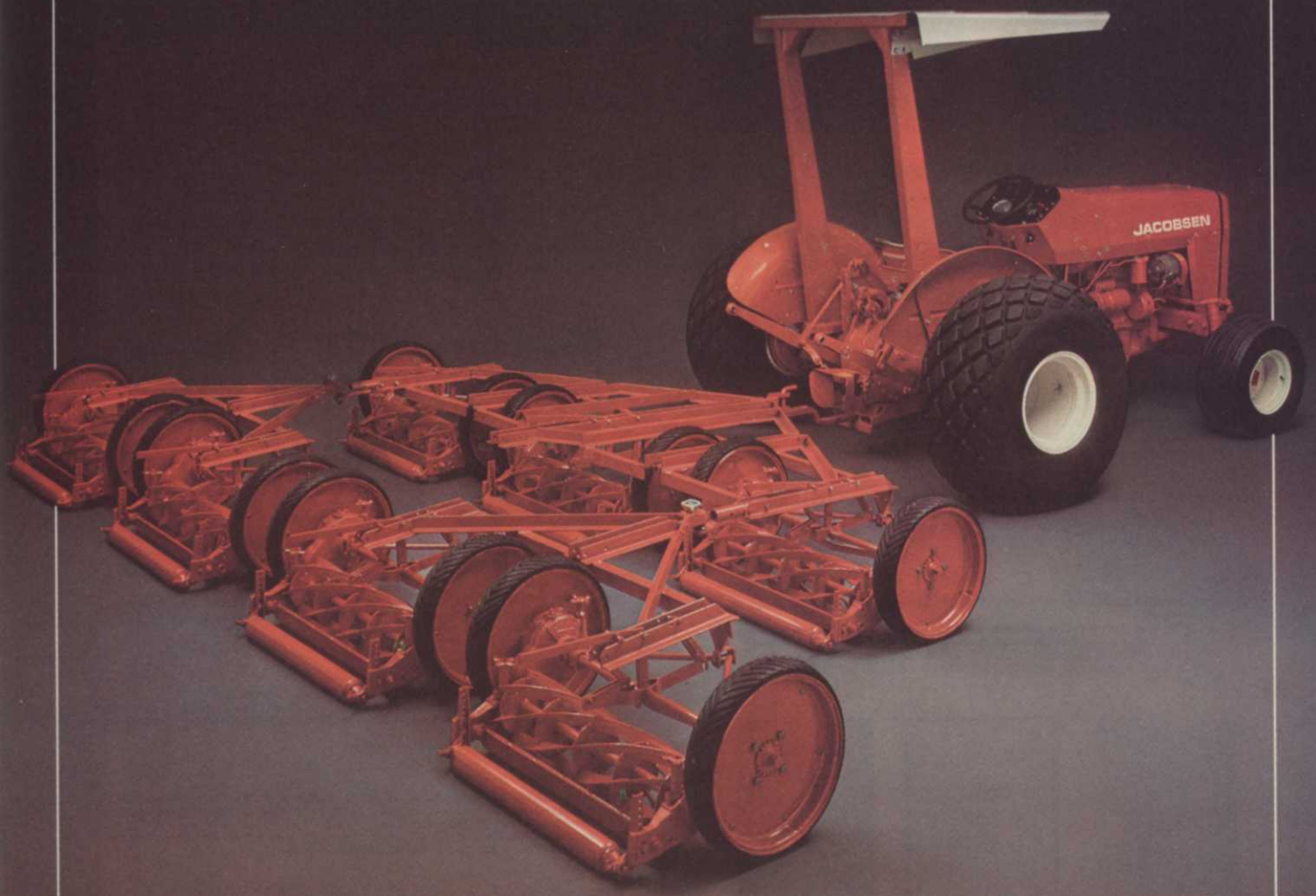

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360 - HOME LANDSCAPE by Garret Eckbo
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780 - PARK AND RECREATION MAINTENANCE by Sternoff & Warren
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385 - TREES FOR ARCHITECTURE AND THE LANDSCAPE by Robert L. Zion
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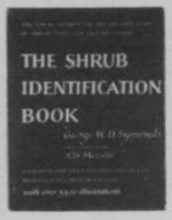
665 - THE OXFORD ENCYCLOPEDIA OF TREES OF THE WORLD - Bayard Hora, Editor
An authoritative reference describing the principal trees of the world. Includes biology and growth of trees, ecology of different types of forest, forest management, timber usage, and pest and disease control. **$24.95**



710, 720 - SHRUB IDENTIFICATION by George Symonds
Pictorial key to identify shrubs. Contains more than 3,500 illustrations to check specimens. Popular and botanical names are given for each shrub with handy index tabs for quick reference. **$18.00 hardcover, $8.00 paperback**

510 - HORTUS THIRD from Cornell University
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530 - INTERIOR PLANTSCAPING by Richard Gaines
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WTT 12

Award *from page 18*

Top left:
The entryway to the Eastman residence in Laguna Beach, CA.

Top right:
Part of the $20 million New York City public galleria at Park Avenue Plaza.

Left:
Plants provide privacy and color at Armco offices in Middletown, OH.

national certification program for the field.

IPA selected 29 projects for the 1981 awards. The following winners were selected from the design/installation category. Awards were also presented for maintenance, creative horticulture and continuous watering. Awards were announced and presented at IPA's annual convention in St. Paul October 29.

Green Expectations

Dallas nightlife is natural at Isadora's Disco. For this project, Green Expectations specified large numbers of Kentia Palms, Bouganvillia, and large hanging baskets of Cissus and Airplane plants. The plants tie in well with wicker furniture to provide a cool, casual respite from the flashing lights and activity of the dance floor. The project won the highest honor in the $5,000 - $10,000 category. Rhea Lilly was project manager. Green Expectations also received a merit award in the $10,000 to $25,000 category for the Centre Plaza Holiday Inn in Dallas, managed by Robert Abramson.

Decora

The highest honor in the $10,000 to $25,000 category was presented to Decora of Greenwich, CT, for its design and installation of Jardines Restaurant in Cos Cob, CT. Project manager Bruce Crowle adapted his design to benefit from a two-floor plan with many mirrored walls. Combinations of large Palms and Ficus trees, colorful potted plants, and trailing varieties are magnified by the mirrored walls. Wicker baskets and rattan plant stands contribute to the casual atmosphere of this popular restaurant.

John Mini

The highest honor in the $25,000 and above category was John Mini Indoor Landscapes for the Park Avenue Plaza in New York City. Few firms get this kind of job challenge. Park Avenue Plaza was constructed with a 30-foot high public galleria that includes a 100-foot waterfall to complement this 15-sided, green glass building. The budget for the galleria alone was $20 million. Mini chose a mix of seasonal flowers in a setting of Ficus Benjamina, Dracaena "Warneckei" and Spathiphyllum "Mauna Loa." A crane and four

Continues on page 24

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Irrigation Division

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Award *from page 22*

men were required to install the large Ficus trees. The green glass sides of the building provide optimum conditions for plant lighting, but a complete lighting system on timers was included.

Trabuco Canyon Plantenders

The highest honor in the residential design and installation category was presented to Laurie Park of Trabuco Canyon Plantenders for the Arthur Eastman residence in Laguna Beach, CA. The house overlooks the Pacific Ocean from a bluff and features a large, two-story entryway. Park chose plants to adapt to Southern California weather conditions and include the unusual Reflexa as well as Philadendron, Dracaena, Spathiphyllum, Chamaedorea, and Grape Ivy. The overall effect of the residence is airy, spacious and light-filled.

Something Different

The highest honor in the less than $5,000 category was awarded to Barbara Helfman of Something Different Interior Plantscaping for the Armco, Inc. offices in Middletown, OH. New open landscape offices depend greatly on interior plants and coordinated color schemes. In this case, Helfman sought to enhance the navy, gray and burgundy color scheme of the three-floor office building. Handthrown and glazed pottery were chosen to go with a large mural and the colors of the furnishings. Tropical foliage was used extensively in long planters atop files and panels to soften lines. The plants offer privacy, control traffic, and add a natural touch to open office spaces.

Summary

Tropical plants are not the only elements of interior plantscaping. The IPA award winners show that a spectacular setting is not spectacular without coordinated planters, plants, and lighting. Perhaps the hardest type of interior plantscaping is the open landscape of modern office buildings. The fixed elements of the landscape are wall to wall and look alike. Only plant features save the office environment from being stark. For this reason, the designer holds the upper hand in interior plantscaping. However, maintenance is the bread and butter of many interior firms with its regular income.

Many interior designers work on a consultant basis for building and landscape architects. This relationship has prevented intrusion by unqualified interior plantscaping firms in many cases. The creation of a self-regulating body to certify individuals further strengthens the market's image.

The florist industry has treated the interior plantscapers as distant cousins whereas the landscape industry, both contracting and architecture, has made a concerted effort to welcome the new and important market to the overall landscape industry. There is a new and exciting dimension to the landscape market, and it appears that its future is secure. **WTT**

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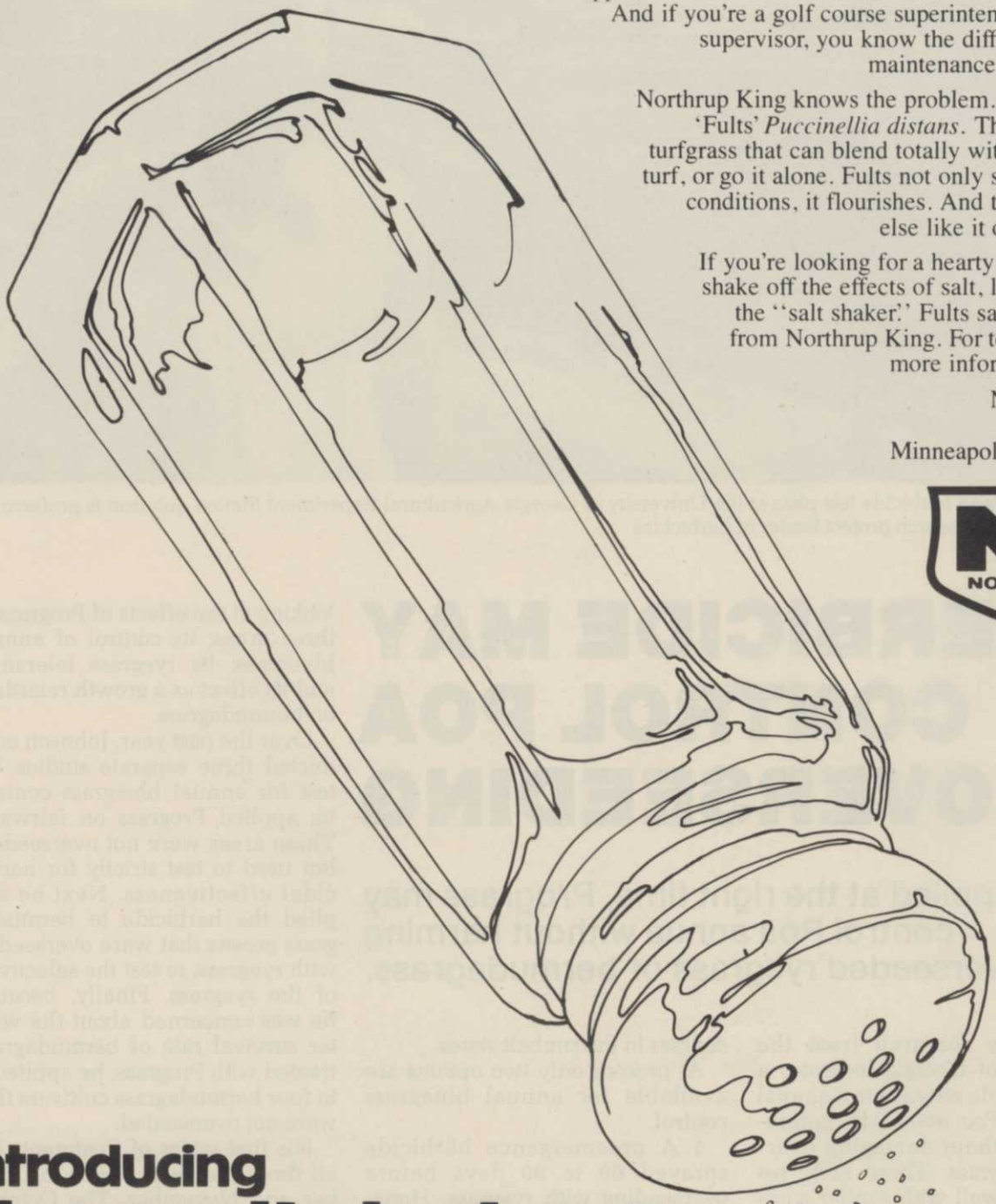

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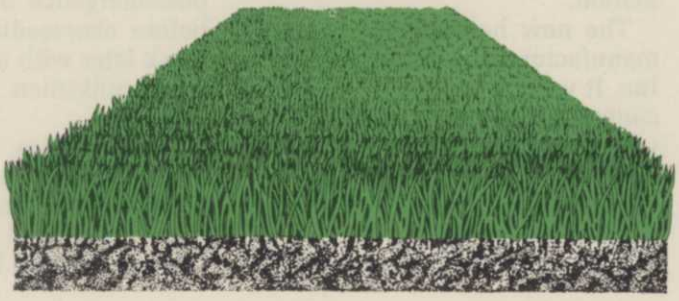

B.J. Johnson and herbicide test plots at the University of Georgia Agricultural Experiment Station. Johnson is professor of agronomy and research project leader of herbicides.

HERBICIDE MAY CONTROL POA IN OVERSEEDING

If applied at the right time, Prograss may control Poa annua without harming overseeded ryegrass or bermudagrass.

Preliminary research from the University of Georgia indicates a new herbicide may control annual bluegrass *(Poa annua)* in bermudagrass without damaging overseeded ryegrass. These early results tie in well with similar studies conducted at Auburn University over a 12-year period, according to B.J. Johnson, professor of agronomy at the University of Georgia Agricultural Experiment Station.

The new herbicide is Prograss, manufactured by BFC Chemicals, Inc. It will be available this fall to control annual bluegrass in greens where ryegrass is overseeded in bermudagrass.

Controlling annual bluegrass in overseeded greens is one of the major weed problems facing golf courses in the sunbelt states.

At present only two options are available for annual bluegrass control.

1. A preemergence herbicide sprayed 60 to 90 days before overseeding with ryegrass. Hopefully, overseeding is delayed until the herbicide loses its residual action. If not, the ryegrass can be severely damaged.

2. Use pronamide either pre- or postemergence one to two weeks before overseeding. Then, treat a week later with an activated charcoal application to neutralize the herbicide.

"I'm not sure, but the activated charcoal may neutralize some pesticides that may be used later in the year," said Johnson.

What Johnson has been doing is looking at the effects of Prograss in three areas: its control of annual bluegrass; its ryegrass tolerance; and its effect as a growth retardant on bermudagrass.

Over the past year, Johnson conducted three separate studies. To test for annual bluegrass control, he applied Prograss on fairways. These areas were not overseeded, but used to test strictly for herbicidal effectiveness. Next he applied the herbicide to bermudagrass greens that were overseeded with ryegrass, to test the selectivity of the ryegrass. Finally, because he was concerned about the winter survival rate of bermudagrass treated with Prograss, he applied it to four bermudagrass cultivars that were not overseeded.

His first series of treatments for all three programs began in October and November. The October treatment was primarily for preemergence control at the time of overseeding. The November treatment, applied at a low rate, was to extend the preemergence control period and for postemergence control of any escaped annual bluegrass.

He treated annual bluegrass in February and March, when the annual bluegrass is fully mature, to see if the herbicide would control it as a late postemergence treatment.

Continues on page 28

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Herbicide *from page 26*

His results indicated excellent early annual bluegrass control. "The best treatments were in October and November. When we delayed treatments until February we had poor results. In addition, the February treatments delayed green-up of the bermudagrass. These preliminary results of excellent annual bluegrass control are very similar to (Prof.) Ray Dickens' research at Auburn, where they've been looking at Prograss for several years."

Although Johnson cautions that his results are still preliminary, and need to be duplicated before he makes a recommendation, he found that the herbicide's effects on overseeded ryegrass were minimal. Bermudagrass growth in the following spring was normal when treated in October and November, but severely delayed when treated in February and March. Of the four bermudagrass cultivars tested, Tifway showed the least effect and Ormond was affected the most. Tifgreen and Tifdwarf were affected slightly.

Johnson noted that the herbicide does delay or retard bermudagrass growth once it has been applied. This would indicate that the best time for application would be several weeks after overseeding when ryegrass has become well established. Earlier applications could result in some thinning of the greens until the ryegrass becomes established.

Johnson presented his preliminary data to the Georgia Golf Course Association meeting at the Cherokee Town and Country Club in Dunwoody, Ga.

During the coming year, he plans to duplicate his earlier tests as well as expand testing in the area of Prograss' effect on other overseeded varieties.

Ken Chisholm, BFC Chemicals' project manager for the herbicide recommends that for preemergence or postemergence control of annual bluegrass and common chickweed in dormant bermudagrass overseeded with perennial ryegrass, apply in the fall at the time of or up to 30 days after overseeding. The rate should be two to four pints per acre in 20 to 60 gallons of water.

One or two supplemental applications may be necessary, Chisholm adds. These applications should be made at a rate of two pints per acre at 30 to 60-day intervals to maintain control through the winter months.

Chisholm says applications of Prograss after February 1st **are not recommended.** Late applications may temporarily delay transition into active growth of bermudagrass in the spring.

In established perennial ryegrass turf, he says applications are recommended from two to four weeks prior to the main period of annual bluegrass germination and up to 30 days after emergence. Recommended rates are two to four pints per acre in 20 to 60 gallons of water. Applications may be repeated one to two times if needed at 30 to 60-day intervals to maintain control.

Overseeding with perennial ryegrass may be accomplished at any time during the treatment period, he adds. Prograss is recommended for use in new seedings of perennial ryegrass at a rate of four pints per acre for broad-spectrum preemergence weed control.

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NATIVE SHRUBS ARE BACKBONE OF LANDSCAPES

Allspice, Spicebush, Bayberry, and Snowberry

BY DOUGLAS CHAPMAN, "Horticulturist, Dow Gardens, Midland, MI"

Native shrubs should provide the backbone for home and commercial landscapes. Four native shrubs which thrive when grown in full sun or light shade which provide a real diversity to the landscape include Carolina Allspice, Spicebush, Northern Bayberry, and Snowberry. These natives are relatively free of insect and disease problems, will grow in a wide range of soil conditions, and provide color and uniqueness at times when other shrubs are just background.

Carolina Allspice *(Calycanthus florida)* is native from Virginia to Florida but grows acceptably as far north as Boston and Central Michigan. It grows well in sun or shade but is usually slightly taller when grown in shady conditions. It is a dense round shrub, reaching 6 to 8 feet in height and 6 to 10 feet in width at maturity but in northern areas it seldom grows over 6 feet in height and width. Calycanthus can be transplanted easily during the spring. It grows in a wide range of soil conditions, thriving in moist, well-drained loamy soils but adapts to well-drained, almost droughty conditions. It has darker green leaves during the summer months, becoming a pale yellow-green in the fall but does not develop effective fall color. The two-inch dark reddish-brown, star-like flowers appear sporadically from late May through June. This star shape is a unique aesthetic trait. Further, these flowers are very fragrant. The urn-shaped fruit (capsule-like at maturity) is not very effective. This shrub is outstanding in native plantings as specimens in the home landscape and mass plantings in large or commercial landscapes.

Spicebush *(Lindera benzoin)* is an outstanding shrub, 6 to 10 feet in height and width. It is native from Maine to Florida. Lindera is a native shrub which is effective in the home or commercial landscape, in naturalized plantings, specimen, or used in small groupings. Spicebush thrives in full sun but is acceptable in partial sun. It is a good companion to pine or at the edge of a beech-maple-oak woods. It has been reported to be difficult to transplant because of the coarse roots but we have had 98% success when planting in moist, well-drained, sandy loam. During the spring the light green leaves are oblong, 3 to 5 inches in length. This lime-green foliage of summer is transformed into a rich yellow during fall. This fall color is spectacular. Spicebush flowers very early in the season (late April in Central Michigan). These thread-like flowers, borne in clusters near the terminal, are yellowish-green in color. The fruit which is scarlet and shaped somewhat like raspberries can be spectacular along with the fall foliar color. This native is underused and should be grown more in the trade. Lastly, the leaves and stems are fragrant, just one additional reason to consider culture of this outstanding plant.

Northern Bayberry *(Myrica pensylvanica)* is native from Nova Scotia to Pennsylvania mostly along the coast. It is very salt-tolerant (cholide). Bayberry has a long history or association with the development of our country. It was used from colonial times to present in the making of highly aromatic candles (Bayberry candles). This semi-evergreen is perfectly hardy when planted in sandy, well-drained soils. Dirr reports it will exist in the clay soils of Central Illinois. It should be transplanted

Continues on page 32

Carolina Allspice has reddish-brown flowers.

Spicebush is a good companion to pine or as an edge of woods.

balled and burlapped during early spring. Bayberry is an outstanding shrub when used in mass plantings associated with pine or broad-leaved evergreens as it has similar requirements. Myrica spreads from root suckers and if planted in full or partial sun will thrive. It will rapidly die out in 50% or more shade. The leaves are a rich dark green. They are oblong, 1½ to 4 inches in length. Bayberry flowers are not particularly effective but the grey fruit which literally lines the one-year old growth can be exciting during the fall. This fruit is usually profuse on one-year old growth. The foliage or branches, when crushed, are extremely fragrant. Although Bayberry has been reported to reach 5 to 12 feet in height and width, we usually find it rarely over 4 to 6 feet in height. Because Myrica spreads by root suckers, it tends to form large clumps and is most effective when used in mass plantings, be it for individual home landscapes or commercial landscapes.

Common Snowberry *(Symphoricarpos albus)* has been reported to be of little landscape value, but when noted in the fall with fruit, it is unique yet exciting. This naturalized plant was brought to this country during the late 1800's and can presently be found growing in the Canadian Maritime Provinces to Virginia and west to Minnesota. This dense shrub at maturity has a somewhat upright habit, reaching 3 to 5 feet in height and 2 to 4 feet in width. The leaves are opposite, somewhat honeysuckle in appearance, being a deep blue-green during the summer with no effective fall color. The perfect pink flowers are borne in terminal clusters during June. The white berry-drupe fruit are borne in clusters. They are interesting and afford an opportunity for one to truly enjoy the landscape. Snowberry can be planted in a wide range of soil conditions from sand to clay but prefers well-drained situations. Further, it is a good companion plant when planted at the edges of woods as it prefers full to medium sun. This shrub when found as understory or a border plant in large area landscapes, commercial landscapes, parks, or home landscapes is exciting. Further, Snowberry has few or no catastrophic insect or disease problems.

The four above-mentioned native shrubs are underused in today's landscapes. They are particularly effective when used in naturalized plantings as specimen shrubs or in mass borders. They are usually most effectively grown in full or partial sun. They have no catastrophic insect and disease problems, are relatively easy to transplant, and will generally decrease maintenance requirements for most landscapes. They are not only exciting for their flower color or fruit but also Spicebush, Carolina Allspice, and Bayberry are exciting when the leaves and stems are crushed, giving off a unique fragrance. These plants truly stimulate all our sense while adding little to maintenance costs. **WTT**

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WEEDS TREES & TURF

1981 INDEX

A

Arborists; Treat the Tree, not the Customer. D. Nielson. ..... July - pp. 40.
Athletic Field Care; Choices. W.H. Daniel, R.P. Freeborg. ..... August - pp. 40.

B

Birch; Consider Mature Characteristics in Selection. D. Chapman. ..... April - pp. 17.
Birch Selection Increases Borer Resistance. M. Dirr. ..... February - pp. 51.
Business; New Prospects, Soliciting. D. Johnstone. ..... April - pp. 19.
Business; Updating Old Ideas. D. Johnstone. ..... June - pp. 40.
Buyer's Guide to Equipment, Chemicals, Supplies and Distributors. . September 37.

C

Combest, Edgar. Turf Vehicle Maintenance. ..... November - pp. 48.
Computers; Entering the Age of. D. Johnstone. ..... May - pp. 12.
Container Ornamentals Solve Preparation and Maintenance Woes. G. Anderson. ..... April - pp. 14.
Containers, Pesticide Replace Drums. H. Day. ..... October - pp. 42.

D

Drainage Design for Football Fields. J. Moreland. ..... April - pp. 46.
Drought-Stressed Ornamentals: Prospects for Winter Damage. ..... January - pp. 30.
Drought Tests Standard Turf Recommendations. ..... July - pp. 14.

E

Energy Saving Concepts for Landscapes. A. Moffatt and M. Schiler. ..... February - pp. 17.
Energy Use for Turfgrass in Florida. ..... March - pp. 37.
Engine Life, Fuel Efficiency Improve. ..... May - pp. 37.
EPA, Reagan's; Balancing Regulations With Budget. J. Dickinson... April - pp. 35.
Equipment Regulations; Confusion Reigns Over. ..... October - pp. 18.
Equipment Rental; Pros and Cons. D. Johnstone. ..... March - pp. 16.

G

Golf Car Sales Improve as Fleets Fail. ..... November - pp. 42.
Golf; Nine-Hole Courses Serve Their Purpose. J. Much. ..... August - pp. 14.
Golf; Preparing for the PGA. ..... October - pp. 24.
Golf: Winter Overseeding Test Results on Greens. J. Kranz. ..... September - pp. 16.
Greenbelt Surrounds Canadian Steel Plant. ..... February - pp. 42.
Greenbug; Kentucky Research Reveals Turf Preferences. D.W. Jackson, K.J. Vessels, and D.A. Potter.... March - pp. 55.
Ground Covers in Low Maintenance Areas. D. Chapman. ..... June - pp. 27.
Ground Covers; Sun Loving. D. Chapman. ..... July - pp. 30.
Gypsy Moth; Invasion Runs Arborists Ragged. ..... September - pp. 28.
Gypsy Moth; Outbreak, Northeast Under Alert. ..... May - pp. 16.

H

Herbicides May Control Poa in Overseeding. ..... December - pp. 26.
Herbicides; Pre- and Postemergence for Turf. T.L. Watcshke. ..... March - pp. 28.

I

Insect Pheromones; Increasing Role. I. Weatherston. ..... May - pp. 28.
Interior Landscapes: Award Winning ..... December - pp. 18.
Irrigation Precautions Assure Design Efficiency. M. Morey. ..... April - pp. 31.

L

Landscape; Coop Students Put Education to Action. ..... August - pp. 23.
Landscape; Residential Award Winners. ..... July - pp. 24.
Landscapes; Commercial Award Winners. ..... November - pp. 30.
Landscape Structures; Key Elements in Management. ..... April - pp. 24.
Low-Maintenance Shrubs for Great Plains. J.E. Klett and I. Thoreson. ..... January - pp. 16.

M

Magnolia Cultivars Flower April to August. D. Chapman. ..... May - pp. 46.
Maintenance; Tight Program Keeps Equipment Going in Winter. ..... January - pp. 34.

P

Park; Maintenance Key to Award Winning System. ..... August - pp. 48.
Performance Bonds and Penalty Clauses. D. Johnstone. ..... July - pp. 36.
Photography, Shooting to Win Landscape Awards. James Trigg.. November - pp. 24.
Poa Annua and Low Phosphorus Rootzones. P. Voykin.... February - pp. 48.
Poa Annua; Cultural Practicies to Discourage Invasion In Kentucky Bluegrass. D. Brede. ..... August - pp. 34.
Professional Pest Control: Part of Disney Magic. ..... January - pp. 22.

R

Rhododendrons and Important Differences. D. Chapman. ..... March - pp. 30.
Root Graft Barriers; Include in Tree Disease Prevention. ..... March - pp. 59.

S

Seeding; Drill on Steep Slopes. R. Brammer. ..... June - pp. 30.
Seed Production Balances With Sluggish Demand. ..... October - pp. 20.
Shrubs, Low Maintenance for Great Plains. J.E. Klett and I. Thoreson. ..... January - pp. 16.
Shrubs, Native, Are Backbone of Landscapes. D. Chapman ..... December - pp. 31.
Slow-Release Nitrogen Sources. J. Hall. ..... March - pp. 43.
Sod Growers Learn Respect for Marketing. ..... June - pp. 18.
Sodded Lawn Problems; Cooperation Urged. J. Faulring. ..... June - pp. 16.
Sod; Netting Makes Fescue Sod Practical. R.N. Carrow. ..... May - pp. 32.
Sprayer Products and Trends. ..... March - pp. 22.
Superintendent Strives for Constant Turf Growth. E. Ginn. ..... January - pp. 20.

AUTHORS

T

Thatch Biology; Turf Growth vs. Decomposition. R. Smiley... April - pp. 38.
Tractors, Compact Utility. . October - pp. 28.
Tree Programs; Local Media Exposure Can Help. M. Scearce. ..... August - pp. 58.
Tree Research Increases to Meet Environmental Challenges. D. Chapman..... August - pp. 54.
Trees; Deciduous Modify Building Temperatures. R. Ticknor..... February - pp. 22.
Trees; Experts Discuss New Findings and Diagnosis Technology. A. Cook. .....January - pp. 28.
Trees; The Forgotten (Sassafras, Catalpa, Alder). D. Chapman... November - pp. 54.
Trees; Late Flowerin,' for Summer Color. D. Chapman..... .September - pp. 26.
Turfgrass Damage; Late Winter and Early Spring. J.R. Watson.....March - pp. 62.
Turf Cultivars; Consider for Post-Drought Renovation. R. Schery..... July - pp. 18.
Turf Vehicle Maintenance Includes Knowing Limitations. E. Combest. ..... November - pp. 48.
2,4-D Ban; Compromise Reached in Wisconsin City.....March - pp. 48.

V

Vegetation Management. R. Funk.
January - pp. 50.
February - pp. 56.
March - pp. 64.
April - pp. 63.
May - pp. 50.
June - pp. 44.
July - pp. 47.
August - pp. 60.
September - pp. 112.
October - pp. 48.
November - pp. 58.
Viburnums: Low Maintenance Create Colorful Environment. D. Chapman. .....January - pp. 24.
Viburnums; Non-Native, Thrive in Sandy Loams. D. Chapman. ....February - pp. 44.

W

Weed Control; in Working Ponds. J. Schmidt. ..... June - pp. 32.
Weed Control; Pond Bottom Liners. D. Pullman. ..... June - pp. 36.
Weeds in Cool-Season Grasses, Controlling. J. Jagschitz. ....March - pp. 18.
Windbreaks, Vegetative, as Building Insulators. D. Hanley....February - pp. 27.
Woods Production for Energy. P. Heilman. ..... February - pp. 38.

Anderson, Gary. Container Ornamentals Solve Preparation, Maintenance Woes..... April - pp. 14.

Brammer, Richard. Drill Seeding on Steep Slopes..... June - pp. 30.
Brede, Douglas. Cultural Practices Can Discourage Poa Annua in Kentucky Bluegrass. ..... August - pp. 34.

Carrow, R.N. Netting Makes Fescue Sod Practical..... May - pp. 32.
Chapman, Douglas. Low Maintenance Viburnums. .....January - pp. 24.
Chapman, Douglas. Non-Native Viburnums. ..... February - pp. 44.
Chapman, Douglas. Rhododendrons.....March - pp. 30.
Chapman, Douglas. Birch, Consider Mature Characteristics..... April - pp. 17.
Chapman, Douglas. Magnolia Cultivars. ..... May - pp. 46.
Chapman, Douglas. Ground Covers, Low Maintenance..... June - pp. 27.
Chapman, Douglas. Ground Covers, Sunny..... July - pp. 30.
Chapman, Douglas. Tree Research..... August - pp. 54.
Chapman, Douglas. Late Flowering Trees. .....September - pp. 26.
Chapman, Douglas. Sassafras, Catalpa, European Alder..... November - pp. 54.
Chapman, Douglas. Shrubs, Native ..... December - pp. 31.
Cook, Alan. Experts Discuss New Tree Findings.....January - pp. 28.

Daniel, William. Choices in Athletic Field Care..... August - pp. 40.
Day, Herbert. Pesticide Containers May Replace Drums..... October - pp. 42.
Dickinson, James. Reagan's EPA. ..... April - pp. 35.
Dirr, Michael. Birch Selection Increases Borer Resistance. ..... February - pp. 51.

Faulring, Jerome. Cooperation Urged to Solve Sodded Lawn Problems..... June - pp. 16.
Freeborg, Raymond. Choices in Athletic Field Care..... August - pp. 40.

Ginn, Edward. Superintendent Strives for Constant Turf Growth. ....January - pp. 20.

Hall, John. Slow-Release Nitrogen Sources for Turf. .....March - pp. 43.
Hanley, Donald. Windbreaks as Building Insulators..... February - pp. 27.
Heilman, Paul. Wood Production for Energy..... February - pp. 38.

Jackson, D.W. Greenbug Research Reveals Turf Preferences. .....March - pp. 55.
Johnstone, David. Equipment Rental.....March - pp. 16.
Johnstone, David. Soliciting New Business..... April - pp. 19.
Johnstone, David. Computers..... May - pp. 12.
Johnstone, David. Updating Old Ideas..... June - pp. 40.
Johnstone, David. Performance Bonds. ..... July - pp. 36.
Jagschitz, John. Controlling Weeds in Cool Season Grasses. .....March - pp. 18.

Klett, J.E. Low Maintenance Shrubs for the Great Plains. .....January - pp. 16.
Kranz, Jeffrey. Winter Overseeding Results on Golf Greens. .....September - pp. 16.

Moffatt, Anne Simon. Energy Saving Concepts for Landscapes..... February - pp. 17.
Moreland, John. Drainage Design for Athletic Fields..... April - pp. 46.
Morey, Michael. Irrigation Precautions Assure Design Efficiency. ..... April - pp. 31.
Much, Joseph. Nine-Hole Golf Courses Serve Their Purpose..... August - pp. 14.

Nielson, David. Arborists, Treat the Tree, not the Customer..... July - pp. 40.

Potter, D.A. Greenbug Research Reveals Turf Preferences. .....March - pp. 55.
Pullman, Douglas. Pond Bottom Liners Aid Weed Control. ..... June - pp. 36.

Scearce, Michael. Local Media Exposure Helps Tree Program. ..... August - pp. 58.
Schery, Robert. Consider New Cultivars for Post-Drought Renovation..... July - pp. 18.
Schiler, Marc. Energy Saving Concepts for Landscapes..... February - pp. 17.
Schmidt, James. Weed Control for Working Ponds..... June - pp. 32.
Smiley, Richard. Thatch Biology, Growth vs. Decomposition..... April - pp. 38.

Thoreson, Iris. Low Maintenance Shrubs for the Great Plains.....January - pp. 16.
Ticknor, Robert L. Deciduous Trees Modify Building Temperatures. ..... February - pp. 22.
Trigg, James E. Landscape Photography, Shooting to Win Awards..... November - pp. 24.

Vessells, K.J. Greenbug Research Reveals Turf Preferences. .....March - pp. 55.

Watschke, T.L. Pre- and Postemergence Herbicides for Turf.....March - pp. 21.
Watson, James R. Late Winter, Early Spring Turf Damage.....March - pp. 62.
Weatherston, Ian. Increasing Role of Insect Pheromones. .....May pp. 28.

How to cut your

Long-lasting Chipco® 26019 fungicide is as good for your budget as it is for your turf.

Because it gives you the longest residual activity, you'll need fewer treatments on greens and tees with Chipco 26019. And fewer treatments on fairways, where it controls diseases longer...from 21 to 28 days. So for every treatment you eliminate thanks to Chipco 26019, you'll save up to $10 an acre in fuel and labor!

And Chipco 26019 is strong medicine. No other fungicide gives better control of the major turf diseases. Chipco 26019 is effective on Helminthosporium

operating costs.

Please read label carefully, and use only as directed.

Leaf Spot and Melting Out, Dollar Spot (including benomyl-resistant), Brown Patch, Fusarium Blight, Fusarium Patch (Pink Snow Mold), and Gray Snow Mold.

For healthier turf on greens, tees and fairways – plus a healthy cut in operating costs – control diseases with long-lasting Chipco 26019. It's just what the doctor ordered.

Rhône-Poulenc Chemical Company, Agrochemical Division, Rhône-Poulenc Inc., Monmouth Junction, NJ 08852.

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Circle No. 128 on Reader Service Card

LETTERS

Change of seasons

Mr. Chapman must be using some arcane calendar because he claims midsummer is anywhere from late May to early July. My calendar, and those of most other of your readers, shows June 21st and 22 as the end of spring and the beginning of summer. Thus you article should have been titled late spring and early summer, for midsummer does not even begin until after all these trees have finished blooming.

I would have included the Japanese Tree Lilac which is a shrub that can be pruned into a single or multiple trunked tree form as a better recommendation. It is reliably hardy in northern Illinois and southern Wisconsin, and to my mind is much more showy than those listed.

Tree Hydrangias come closest to midsummer August blooming and Hercules' Club (Aralia Spinosa) too but neither gets to be truly far up over head so as to be tree-formed.

It seems an oddity that right when the weather is usually the very finest for being out, few if any of trees or shrubs are in full bloom. Even the perenials seem to take a break about then with only a few phlox and plantian lilies and hardy amarylis blooming. But if one is into native prairie plants one can have a wealth of bloom in mid- to late summer with cone flowers, sun flowers, black-eyed susans, asters and more.

But really now, lets not again mislead the readers by calling spring midsummer.

Alyn Hess
Landscape Architect

Useful magazine

Please convey my appreciation to Douglas Chapman for his excellent series on trees. It expands our vision once again beyond the "old reliables" we repeatedly use.

In future issues, we would be interested in articles which dealt with topsoil: what is the accepted norm, typical specifications, modifications to improve, interpreting test lab reports, etc. Even among the "experts," we have found a great range of opinions on all these items.

I know you continually do articles on grasses, but some get rather technical and don't always deal with the practicalities of specifying and using. We would like to see articles in the Doug Chapman vein, which dealt with bluegrasses, fescues, ryes, clovers, etc; what are the best types, new introductions which are proving successful *and are available.*

Dean A. Johnson, ASLA
Johnson and Dee

More foreman needed

I read with great interest your article in the August, 1981 issue of *Weeds Trees & Turf* on co-op landscape students. Being relatively familiar with the program at Mississippi and most of the employers interviewed, I found the comments most interesting. One in particular struck a nerve, that of Wally SaBell's, regarding the need for more two-year programs rather than four-year programs. We employ graduates in supervisory and management levels, but find a great void at the working foreman and crew leader level. It would be appreciated if you would consider doing an article on two-year Vo-Tech landscape schools or should you have a list of associates degree colleges with landscape criterias, I would appreciate your sending me a copy or steering me to a source of this information.

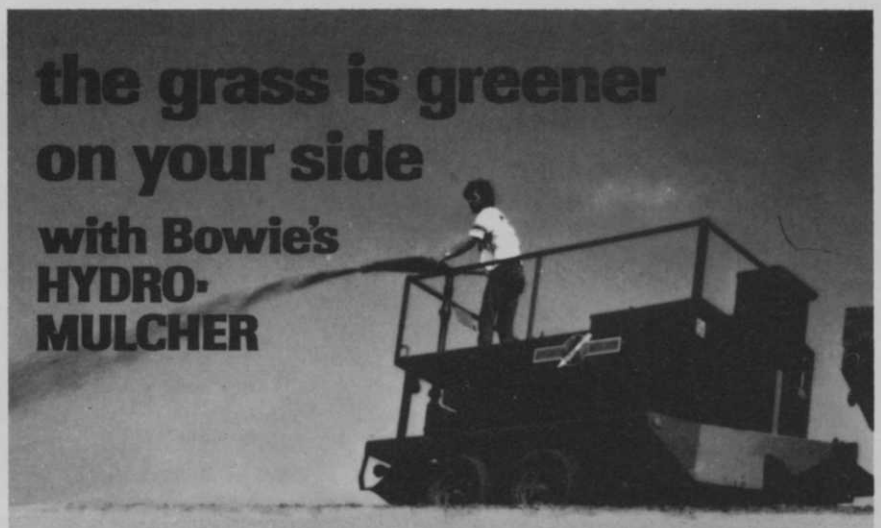
Thank you very much for your assistance and I'll appreciate any help you'll give me along these lines.

Marshall Muginer, President
Lafayette Nursery Sales
Lafayette, LA

Gypsy Moth Eggs

I enjoy reading *Weeds, Trees and Turf* as it helps me keep up-to-date on new endeavors, materials and ideas in the tree industry. However, when I see articles about subjects that I am familiar with and find misleading information, I have to question other articles. I am referring to your "Gypsy Moth" article. Gypsy moths don't lay eggs in April and May (Pages 28 and 34). Also, the paragraph on page 104 implies that the male deposits the eggs. I believe you were referring to a successful mating and the resultant eggs from that mating.

Robert Partyka
Director of Horticulture, Chemscape



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How to get better turf.

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As a golf superintendent, commercial or lawn care specialist, nurseryman or sod grower, you want the most healthy and most beautiful turf and ornamentals your expertise and experience can deliver. You believe in your cultural program for one reason only. It works.

And that's why Diamond Shamrock quality Turf Care products should be a basic part of your total program. Each is proven effective. Formulated for superior performance in the control of diseases and weeds on a variety of grasses and ornamentals.

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Daconil 2787®. The product of choice among turf specialists. A time-tested broad spectrum fungicide that provides unsurpassed control of 9 diseases in turf including dollar spot, brown patch and Helminthosporium, 7 diseases in conifers plus commonly occurring diseases on 29 ornamentals.

You can apply Daconil 2787 flowable fungicide at recommended rates on many grass species and varieties and be assured of excellent turf tolerance even during hot, humid weather. And in 15 years of continuous use, resistance has never been documented.

With proven residual effectiveness plus a built-in surfactant, Daconil 2787 is economical to use in a full season program.

And Daconil 2787 is easy to handle because it flows so smoothly and disperses so quickly.

For golf greens, tees, fairways and ornamental turf-grasses as well as certain ornamentals, you can't buy better disease control than Daconil 2787. (Also available in wettable powder formulation.)

Dacamine® 360D. A new formulation for greater killing action than ordinary 2,4-D. Dacamine 360D postemergence herbicide is a highly effective formulation of 2,4-D that provides broad spectrum control on more than 70 tough perennials, especially dandelions.

Dacamine 360D is an oil soluble formulation which penetrates weed leaves and translocates to the root system of the weed, killing the plant where it lives. Virtually eliminating the possibility of regrowth.

What's more, Dacamine 360D is non-volatile so it won't vaporize even in hot weather. Once applied, there is no risk of injury to nearby ornamentals due to vapor action.

Plus, it's compatible with nitrogen solutions and that can save you time and money too.

So if you want superior killing action without volatility to stop over 70 broadleaf weeds once and for all, get Dacamine 360D.

MCPP + 2,4-D Amine (1 Plus 1). A new product for excellent weed kill that's economical and convenient.
Designed in a packaged mix, this new combination of MCPP and 2,4-D phenoxy acids is formulated for use on turf and golf course fairways.

MCPP + 2,4-D Amine (1 Plus 1) delivers effective control of hard-to-kill and common broadleaf weeds with better economy than the other leading postemergence herbicide.

It's ideal for early season weed control on established turf because it provides first rate killing power with gentleness to most tender grasses. And it can be applied around trees without risk of root injury.

MCPP + 2,4-D Amine (1 Plus 1). The broad spectrum herbicide that's tough on weeds, tender on grass and more economical.

MCPP-K-4. Early control of tough viney weeds.
A postemergence phenoxy herbicide that provides first rate, early control of hard-to-kill viney weeds that 2,4-D formulations can miss.

MCPP-K-4 is especially effective against clover, chickweed and plantain which makes it an excellent herbicide for both lawns and golf courses.

What's more, MCPP-K-4 is gentle on tender grass.

For dependable results, make it MCPP-K-4.

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This phenoxy formulation combines effectiveness and economy for control of broadleaf weeds in lawns, golf courses and other areas.

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Amine 4D is a useful weapon in your war against broadleaf weeds.

Daconate® 6 and Bueno® 6 postemergent herbicides.
Proven performers against tough weeds such as nutsedge, chickweed, wood sorrel and a variety of grassy weeds.

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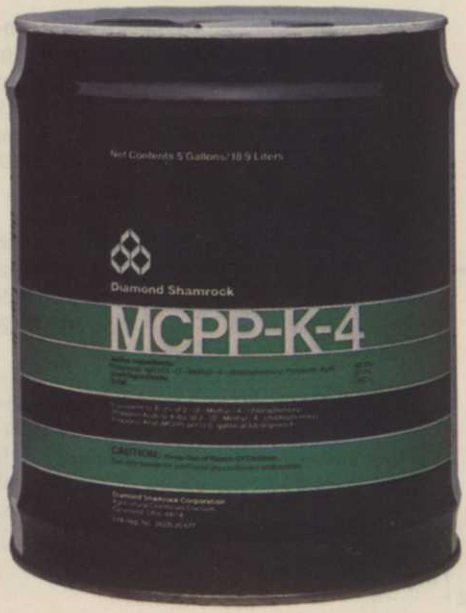

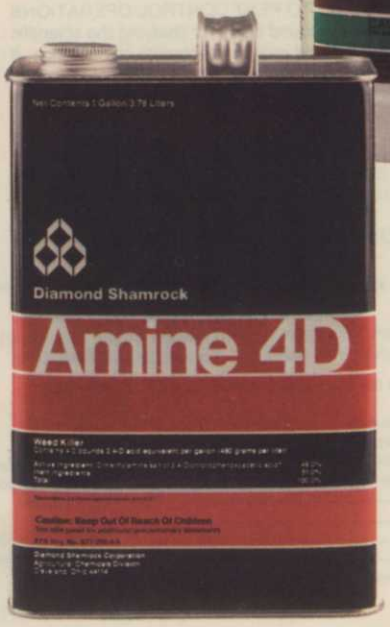

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Diamond Shamrock Corporation
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Always follow label directions carefully when using turf chemicals.

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WT&T EVENTS

The current issue of WEEDS TREES & TURF carries meeting dates beginning with the following month. To insure that your event is included, please forward it, 90 days in advance, to: WEEDS TREES & TURF Events, 757 Third Ave., New York, NY 10017.

Landscape Design Short Course for Residential Properties, Cooperative Extension Service, Ohio State University, Wooster, OH, **Dec. 14-16.** Contact Fred K. Buscher, Area Extension Agent, Landscape Horticulture, OARDC, Administration Building, Wooster, OH 44691, 216/262-8176.

Twenty-Second Annual Illinois Turfgrass Conference and Tradeshow, Prairie Capital Convention Center, Springfield, IL, **Dec. 15-17.** Contact Dr. Thomas Fermanian, 1707 Orchard St., Urbana, IL 61801, 217/333-7847.

Turfgrass Disease Minicourse, Blacksburg, VA, **Dec. 15-17.** Contact Cooperative Extension Service, Virginia Polytechnic Institute and State University, Patton Hall, Blacksburg, VA 24061, 703/961-6491.

North Carolina Nurserymen's Short Course and Trade Show, Pinehurst Hotel, Pinehurst, NC, **January 3-5,** Contact William Wilder, NCAN, RT. 2, Box 397, Knightdale, NC 27545.

Maryland Turfgrass '82, Baltimore Convention Center, **Jan. 4-6.** Contact Dr. Thomas Turner, Department of Agronomy, University of Maryland, College Park, MD 20742, 301/454-3716.

Winter Turfgrass Course, Cook College/Rutgers University, New Brunswick, NJ, **Jan. 4-Mar. 12.** Contact Edward Lipman, Cook College, P.O. Box 231, New Brunswick, NJ 08903, 201/934-9465.

Mississippi Nurserymen's Association, Annual Membership Meeting and Seminar, Metro-Ramada Inn, Jackson, MS, **Jan. 10-12.** Contact Walter E. Davis, P.O. Box 242, Poplarville, MS, 601/795-4526.

53rd Annual Ohio Florist Short Course, Ohio Center-Hyatt Regency Hotel, Columbus, OH, **Jan. 10-13.** Contact Harry Tayama, Ohio Florists' Association, Columbus, OH 43210.

1982 North Carolina State University Agricultural Chemicals School, Jane S. McKimmon Center for Extension and Continuing Education, Raleigh, NC, **January 11-12.** Contact Harry Duncan, Plant Pathology, Box 5397, Zip 27650, 919/737-2711.

Landscape Design Short Course for Residential Properties, Cooperative Extension Service, Ohio State University, Wooster, OH, **Jan. 13-15.** Contact Fred K. Buscher, Area Extension Agent, Landscape Horticulture, OARDC, Administration Building, Wooster, OH 44691, 216/262-8176.

Mid-Atlantic Nurserymen's Trade Show, Baltimore Convention Center, Baltimore, MD, **Jan. 18-20.** Contact Mid-Atlantic Nurserymen's Trade Show, Perry Hall, MD 21128, 301/256-6474.

52nd Annual Michigan Turfgrass Conference, Longs Convention Center, Lansing, Michigan, **January 19-20, 1982.** Contact: Paul Rieke, Dept. of Crop and Soil Sciences, Michigan State University, E. Lansing, MI, 48824. 517-355-0266.

Twentieth Nebraska Turfgrass Conference and Trade Show, Holiday Inn, Omaha, NE, **Jan. 19-21.** Contact Robert C. Shearman, Turfgrass Specialist, 377 Plant Science Complex, University of Nebraska, Lincoln, NE 68583, 402/472-2550.

Michigan Association of Nurseryman Convention and Trade Show, Grand Rapids, MI, **Jan. 20-21.** Contact Richard Ahti, P.O. Box 26008, Lansing, MI 48909, 517/394-0236.

Massachusetts Horticultural Congress, Dunfey's Hyannis Hotel, Hyannis, MA, **Jan. 20-22.** Contact Deborah Fanning, Massachusetts Horticultural Congress, 715 Boylston Street, Boston, MA 02116, 617/266-6800.

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WTT 12

Associated Landscape Contractors of America Annual Meeting & Trade Exhibit, Hilton Riviera, Palm Springs, CA, **Jan. 24-29.** Contact ALCA, 1750 Old Meadow Road, McLean, VA 22102, 703/821-8611.

New York Turf & Landscape Association, Long Island Gardeners Association, Hudson Valley and Long Island Cooperative Extension Service, Annual Turf and Landscape Conference, Tappan Zee Inn, Nyack, NY, **Jan. 27.** Contact Frank Claps, 136 Laurel Avenue, Larchmont, NY 10538, 914/834-6846.

Winter National Hardware & Home Center Show, Las Vegas Convention Center, Las Vegas, NV, **Jan. 30-Feb. 1.** Contact Winter National Hardware and Home Center Show, Cahners Plaza, P.O. Box 3833—999 Summer St., Stamford, CT 06905, 203/964-0000.

Twenty-Seventh Annual Southwest Park and Recreation Training Institute, Lake Texoma Lodge, Kingston, OK, **Jan. 31-Feb. 3.** Contact James W. Kitchen, Institute Director, Department of Park Administration and Landscape Architecture, Texas Tech University, P.O. Box 4169, Lubbock, TX 79409, 806/742-2858.

Park and Recreation Maintenance-Management School, Wilson Lodge/Oglebay Park, Wheeling, WV, **Jan. 31-Feb. 4.** Contact Alice Strickland, North Carolina State University, Division of Continuing Education, P.O. Box 5125, Raleigh, NC 27650, 919/737-2261.

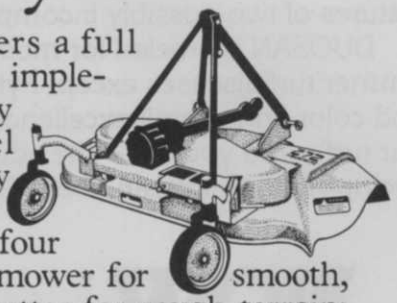
GCSAA International Turfgrass Conference and Show, New Orleans, LA, **Jan. 31-Feb. 5.** Contact Golf Course Superintendents Association of America, 1617 St. Andrews Drive, Lawrence, KS 66044, 913/841-2240.

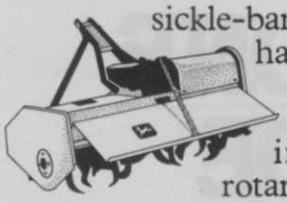
Weed Science Society of America, Annual Convention, Boston Park Plaza Hotel, Boston, MA, **Feb. 7-11.** Contact WSSA 309 West Clark Street, Champaign, IL 61820.

National Arborist Association 1982 Annual Meeting, Maui Surf Hotel, Maui, Hawaii, **Feb. 14-18.** Contact National Arborist Association, Inc., 3537 Stratford Road, Wantagh, NY 11793, 516/221-3082.

Even if you don't own a John Deere tractor, you can still have John Deere behind you.

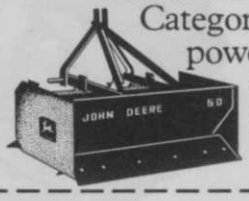
John Deere offers a full line of quality-built implements to fit nearly any make of small diesel tractor with a Category 1 3-point hitch. For example, there are four mowers: a grooming mower for smooth, even cuts; a rotary cutter for rough terrain; a flail mower for trashy conditions; and a sickle-bar mower for roadsides and hayfields.





For landscaping, John Deere has hitch-mounted implements including a rotary tiller, a box scraper, a rear blade and a post-hole digger. Of course, we also have a full line of hitch-mounted farm implements. So even if your tractor isn't green, you can make it do more when you put John Deere behind it.

For more information about John Deere Category 1 3-point hitch implements power-matched to small diesel tractors, see your John Deere dealer or send for a free leaflet.



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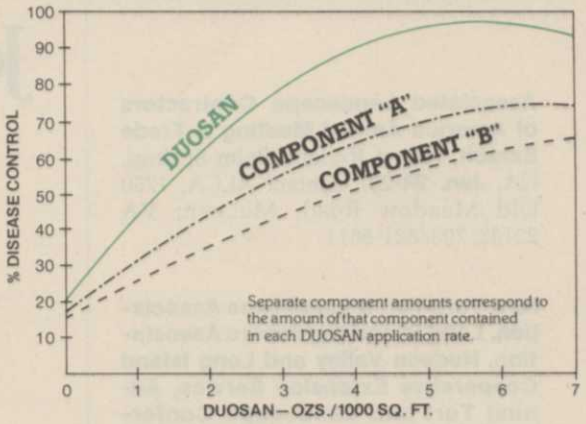
SUMMARY OF DATA FROM 6 EXPERIMENTS INVOLVING COMBINATIONS OF 4 ORGANISMS – Dollarspot, Brown Patch and Leafspots (Curvularia and Helminthosporium)



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NOW THERE'S ONE FUNGICIDE FOR TURF...

THAT'S BETTER THAN TWO!

News *from page 12*

NURSERY

NMC fund drive way ahead of schedule

In the first month of fiscal 1982, the Nursery Marketing Council (NMC) has received 45% of the total amount contributed all of the past year. According to NMC Steering Committee Chairman Gordon Bailey, Bailey Nurseries, St. Paul, NM, income for fiscal 1981 (ended June 30) was $227,379, while income for July, 1981 was close to $125,000.

"We expect an expanded international radio advertising program for NMC this coming year," said Bailey. "We intend to add more weekends and more weekdays to our advertising schedule—as support funds permit. We are looking at additions to the program, too, in the form of specifically-targeted advertising to narrowly defined markets—such as home-builders."

Bailey noted that major wholesale growers and suppliers are adding a voluntary NMC contribution to their invoices amounting to one-fourth of one percent. When their retailing customers include that amount in their payment, the grower or supplier matches the contribution and sends the total to NMC.

EQUIPMENT

OPEI Working On Shredder Standard

The Outdoor Power Equipment Institute has initiated a voluntary standards development program for shredder grinders. This program is virtually completed. The final proposed standard will be submitted shortly to the American National Standards Institute's Board of Standards Review. Final approval is expected soon.

An OPEI safety seal program for shredders will be initiated next year after the ANSI approval has been obtained.

Bannigan Named E-Z Go Vice President

Ed Bannigan has been named vice president of sales of E-Z Go, Augusta, GA. Banningan had previously been western regional manager of the company. He began his career with E-Z Go in May of 1978 as Branch manager.

Continues on page 57

Circle No. 123 on Reader Inquiry Card

Circle No. 120 on Reader Inquiry Card

PRODUCTS

Advanced Drainage Systems is offering its corrugated plastic drainage tubing in a choice of two synthetic wrap

materials for protecting subsurface drains against the most challenging siltation problems. ADS Drain Guard, a 100% nylon envelope is an ultraporous filter that restrains and stabilizes problems solids such as fine sand and silts.

Circle No. 178 on Reader Inquiry Card

Finn Corp.'s T80 tank features a low profile tank design for ground level loading and a hydraulic powered, variable speed paddle agitator.

The hydraulic seeder can be trailered to a site with ease and stability. It is a viable option to higher priced chasis-mounted units.

Circle No. 179 on Reader Inquiry Card

Wyo-Ben's Envirogel is manufactured from bentonite clay and is processed for use in reducing the seepage of fluids through porous soils. According to Wyo-Ben, bentonite can absorb five times its weight of water and expand to 12-16 times its dry volume.

Circle No. 180 on Reader Inquiry Card

The model 10 Turf-Truk is the latest addition to the line of Hester Ag-Truk three-wheeled ranch machines. The model 10, manufacturered by Horizon

Services Company, features a two-passenger bench seat, electric start G300 Honda industrial engine, 3 ft. by 4 ft. cargo box and a load carrying capacity of 1200 lbs.

Circle No. 181 on Reader Inquiry Card

Custom Products' all-weather, steel Cozy Cabs are now available for the brand new John Deere compact utility

tractor. The Custom 300 cabs are ROPS-tested to meet OSHA requirements and feature all-steel construction, tinted safety glass, sliding rear window and vinyl padded interior.

Circle No. 182 on Reader Inquiry Card

Continues on page 53

New Trailblazer™ sweeps turf/hard surfaces

At last! A rugged all-terrain sweeper that can clean both your turf and hard-surfaced areas. Provides productivity undreamed of before.

TENNANT® Trailblazer™ sweeps up to 3 acres of turf or 7 acres of hard surfaces per hour. Has more power than any turf machine.

Lease/time purchase/rental plans available. Write:

Tennant Company, 701 N. Lilac Dr., Minneapolis, MN 55440.

Climbs curbs, articulates to sweep hard-to-reach places.

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sweepers • scrubbers • scarifiers • floor coatings

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- Immediate Pallet Return

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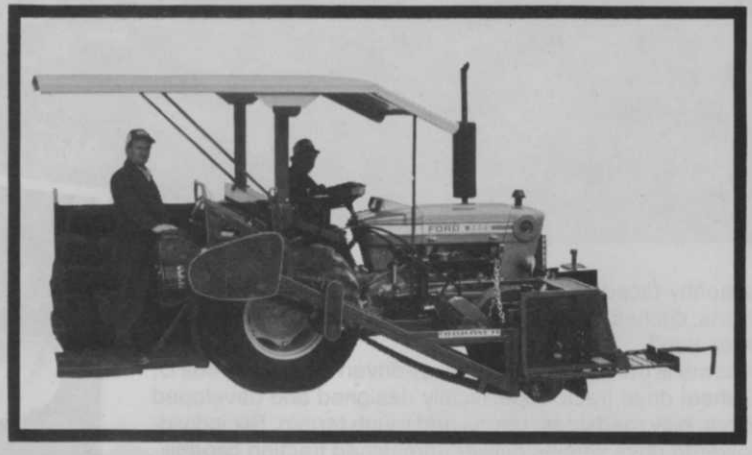
- Operate off uncut turf
- A more uniform cut
- Less down time
- Less top soil removal
- Available in 15, 16, 18 and 24 inch widths and choice of pallet sizes
- Cut, Roll, Slab or Fold 24 hours a day, wet or dry weather, all sod, all conditions.

Top Turf men around the world use Brouwer Harvesters to assure top profit.



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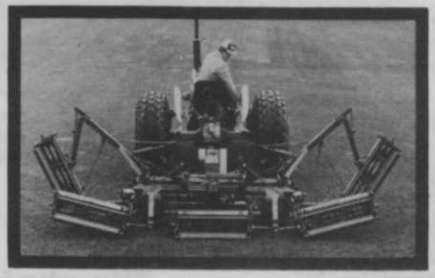

Brouwer PTO Mowers for economy, reliability and cutting the toughest grass.
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EXCEL HUSTLER 602 D

Introducing the new six-wheel drive, self-leveling mower for rough, rugged, hilly terrain!

Consistently faced with the really tough slope mowing jobs? Are culverts, ditches, roadside berms and hilly terrain where your work takes you?

The answer is the new 27.5 hp, diesel-driven HUSTLER 602 D, the six-wheel drive tractor specifically designed and developed for bunkers, hilly roadsides, berms and rough terrain. Six individually-powered drive wheels deliver unmatched traction capabilities in all conditions. The 602 D's exclusive self-leveling feature automatically levels operator station and engine platform on slopes. Cab/engine platform leveling may also be manually controlled up to 27° right or left.

Another HUSTLER exclusive feature is the dual-hydrostatic drive system powering both sets of drive wheels independently. Twin steering levers control direction speed, turning and braking, giving you infinite maneuverability with simple, one-hand control.

Equip this rugged machine with HUSTLER attachments and you have four-season versatility. A 72" heavy-duty rotary deck, 60" flail mower, 60" two-stage snow thrower, 72" dozer blade, 72" rotary broom, cab enclosure kit and more are available with the 602 D.

Call toll free 1-800-835-3260, or write for the name of your HUSTLER distributor and free literature.

The four front wheels on the 602 D are mounted on a walking-beam suspension to allow the tractor to virtually walk over uneven, rutted terrain without loss of traction. Rear wheel hydraulic wheel lift allows smooth, easy turns.

The choice of the Pros.

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Turf & Grounds Equipment

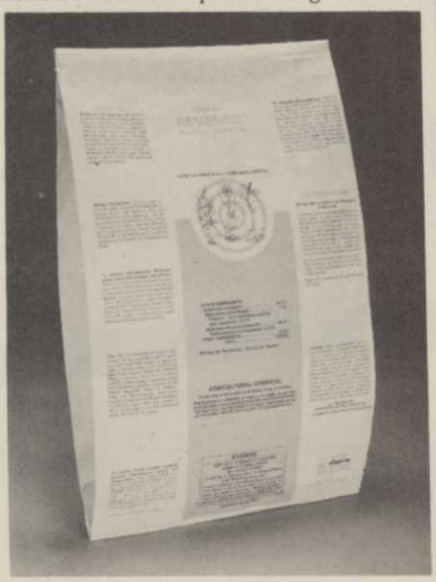
GPW-8-381 EXCEL INDUSTRIES, INC. • BOX 727 • HESSTON, KANSAS 67062 • (316) 327-4911 • (800) 835-3260

Circle No. 109 on Reader Service Card

Vermeer TS-24 Tree Spade is designed primarily for digging and packaging small trees and shrubs. It is engineered to work as a tree packaging attachment for any skid steer or front end loader with an auxiliary hydraulic hookup and a minimum capacity of 1,200 lbs. On skid steer loaders, the 910-lb. unit slips onto the lift forks.

Circle No. 183 on Reader Inquiry Card

Hopkins' Revenge is a double-acting systemic herbicide for control of established annual and perennial grasses on non-crop land such as roadsides and rights-of-way. It contains two herbicides, Dowpon M and Sodium TCA and is formulated to combat Johnsongrass, Bermudagrass, cattails and other pest grasses.



Circle No. 184 on Reader Inquiry Card

Mertz, Inc.'s Drill King is a mobile hydraulic unit that can drill holes from 3 inches to 36 feet. The four-wheel-drive drill is mounted on its own welded steel chassis, with articulated steering and hydraulic ground drives. All systems are operated by hydraulics.

Circle No. 185 on Reader Inquiry Card

Tennant Co.'s Trailblazer is a grounds maintenance machine that is manufacturered to sweep turf and hard surfaces at rates of 3 to 7¼ acres per hour. According to Tennant, the machine uses either a brush or paddle to clean a 60-in. path and simply drives from one surface to another with no adjustments needed. A jet stream of air propels litter into a 2.6-cubic-yard hopper and a 500-sq.-ft. filter permits nearly dust-free operation.

Circle No. 186 on Reader Inquiry Card

Standard Golf Co. has introduced a drag brush for topdressing greens that is designed to eliminate the stress caused by metal drags. The Pro-Line Brush-Easy mounts six heavy-duty brushes in an aluminum frame that has a total weight of 22 lbs. The tow bar is

Continues on page 56

Does the condition of your turf make you see red?

Switching to Pennfine Perennial Ryegrass could color your outlook. It's long been the standard of quality against which other varieties are compared. Why not simplify your life? Go with the most widely used fine-leafed perennial ryegrass in the nation. By the way, if you have trouble finding Pennfine, just ask the turf pro with the best-looking turf around. Chances are he's already using it. Pennfine Perennial Ryegrass, P.O. Box 923, Minneapolis, MN 55440

Circle No. 126 on Reader Inquiry Card

How to make a great crabgrass herbicide even better for turf.

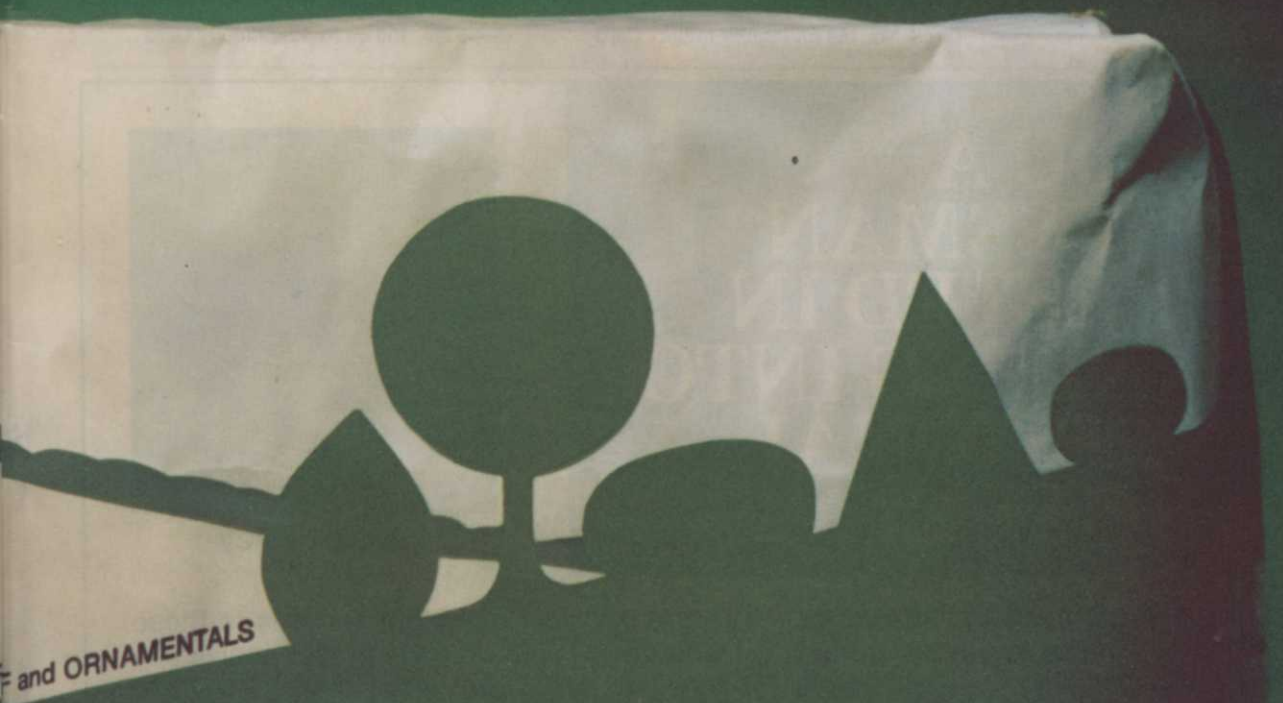
About the only thing that could make Chipco® Ronstar® G herbicide better for turf would be to lower the cost. So that's what we've done. Now you can get the superior performance of Ronstar G at a

dramatically reduced price.

Nothing controls crabgrass and goose grass better than Ronstar G. And you get this great weed control for the whole season with just one easy, early application.

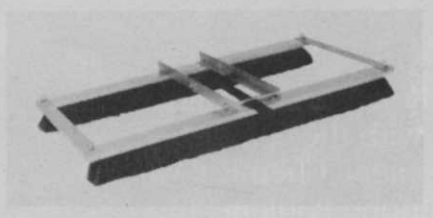
Treat your turf with Ronstar G. The great crabgrass herbicide with the better-than-ever price. Rhône-Poulenc Chemical Co. Agrochemical Div., Rhône-Poulenc, Inc. Monmouth Junction, NJ 08852.

RHÔNE POULENC



RONSTAR® G HERBICIDE

Circle No. 129 on Reader Service Card



designed so that the Brush-Easy may towed in either direction for longer brush life.

Circle No. 187 on Reader Inquiry Card

Excel Industries has introduced a V-blade snow removal attachment for Hustler grounds maintenance tractors

EXCEL HUSTLER V-Blade

with a free float feature to follow uneven surfaces. While many V-blade systems are ineffective on uneven surfaces, the Excel float feature permits the blade to follow contour and clear a swath 60-in. wide.

Circle No. 188 on Reader Inquiry Card

Bunton Co. has added the 19 H.P. Wisconsin diesel engine to its out-front rotary tractor line. The air-cooled engine has a forged crankshaft, cast iron

cylinder and die-cast aluminum crankcase. The fuel injection pump is automatically reset by the governor for quick starts and the two-cylinder unit weighs only 194 lbs.

Circle No. 189 on Reader Inquiry Card

Destructive Turf Insects by Dr. Harry Niemczyk covers pests of warm and cool season grasses and contains over 130 color photos. Included is a color photo guide to identifying insects and mites that inhabit the soil, thatch, leaves and stems.

Circle No. 190 on Reader Inquiry Card

ARE YOU A BUSINESSMAN INTERESTED IN EXPANDING INTO PROFESSIONAL TURF CARE?

Robert Riley

GREEN PRO COOPERATIVE SERVICES is the *only* non-franchise organization that offers you complete training, economical equipment, all necessary forms, contracts, advertising and promotion training, proven advertising brochures, and COMPLETE BACK-UP.

We offer our complete services to those who *do not* want to give up their individuality—nor want to pay huge franchise fees—yet realize that guidance will propel them toward success faster and WITHOUT costly errors. Errors which are inevitable when "learning-by-doing-it-yourself."

CALL
(516) 483-0100 or write **Green Pro Cooperative Services**
380 S. Franklin Street • Hempstead, New York 11550

Circle No. 111 on Reader Inquiry Card

HORTICULTURE

HRI Names John Flemer President; Heard VP

John Flemer, Princeton Nurseries, Princeton, NJ, has been elected president of the Horticultural Research Institute. Flemer succeeds Robert Siebenthaler who will remain on the executive committee as past president.

Bill Heard, Heard Gardens, Des Moines, IA, has been elected vice president, while Bob Voorheis, Blue Ridge Nurseries, Kansas City, MO, has been elected treasurer. William Adams, Adams Citrus Nursery, Haines City, FL and Tom Pinney Jr., Evergreen Nursery Co., Sturgeon Bay, WI, have also been named to the HRI executive committee.

SEED

Tim Bowyer to head Sunbelt Seed Company

Tim Bowyer, PhD, has been named president and chief executive officer of Sunbelt Seed Co., Tucker, GA. Bowyer was formerly vice president of Southern Turf.

Bowyer has done extensive work in the areas of ornamental and turfgrass management. He was assistant extension plant pathologist at the University of Illinois and assistant professor of plant pathology at the University of Georgia.

Sunbelt Seed is a cooperative venture between Southern Turf Nurseries, Tifton, GA, and Loft's Seed Co., Bound Brook, NJ. Sunbelt markets a full line of grass seed for residential, commercial and athletic field applications.

Century Toro Distributors, in cooperation with Toro Co., has loaned two mowing units to the Ohio State University Turfgrass Research Program. A Turf Pro 84 and Groundmaster 72, which are valued at more than $20,000, are expected to save the research program much time and expense in labor and equipment maintenance. Pictured (from left to right) are John Fitzgerald, General Sales Manager of Century Toro; Dr. Roy Kottman, Dean of the College of Agriculture; Dr. Berlie Schmidt, Chairman, Department of Agronomy; Dr. John Street, Turf Extension; Dr. Keith Karnok, Turf Research; and Mike Slinger, Sales Representative, Century Toro.

Does your turf make your reputation good as gold?

It does if it's seeded with Pennfine Perennial Ryegrass. Since its development by Penn State University in 1970, Pennfine has become the number one selling fine-leafed perennial ryegrass in the nation. And the thousands of turf professionals who continue using Pennfine are the biggest vote of confidence. You'll find top-quality Pennfine competitively priced and in ready supply. Pennfine Perennial Ryegrass, P.O. Box 923, Minneapolis, MN 55440

Circle No. 127 on Reader Inquiry Card

CLASSIFIEDS

RATES: 75 cents per word (minimum charge, $20). Bold face words or words in all capital letters charged at $1.00 per word. Boxed or display ads charged at $70 per column inch (one inch minimum). Agency commissions will be given only when camera-ready art is provided by agency. For ads using blind box number, add $5 to total cost of ad. Send ad copy with payment to Dawn Anderson, WEEDS, TREES & TURF, 1 East First Street, Duluth, MN 55802.

BOX NUMBER REPLIES: Mail Box number replies to: WEEDS, TREES & TURF, Classified Ad Department, 120 W. 2nd St., Duluth, MN 55802. Please include box number in address.

Use our classified blind box service for confidential results!

HELP WANTED

HELP WANTED: Sales Representative for Upstate New York territory with Jacobsen Distributor. Salary, expenses, vehicle provided, commission. Excellent benefit package. Send Resume to: S.V. Moffett Co., Inc., Thruway Park Drive, West Henrietta, N.Y. 14586. (716) 334-0100. 1/82

ESTATE GROUNDS SUPERINTENDENT— Unique professional opportunity at historic midwestern estate, now undergoing comprehensive site restoration toward eventual conversion to public institution. This fine property offers an exceptional challenge for an experienced, enterprising professional who seeks expanded career opportunities in estate horticulture and management. Qualifications: B. S. in landscape horticulture or equivalent; substantial experience in all aspects of greenhouse and grounds operation, management and administration; communication and public relations skills necessary. Attractive compensation package; position available January, 1982. All inquiries will remain confidential. For complete information, contact: Estate Consultant, P.O. Box 8665, Ann Arbor, Michigan 48107. Telephone: (313) 662-4457. 12/81

GROUND SUPERVISOR — UNIVERSITY OF NEVADA, LAS VEGAS — LAS VEGAS, NEVADA. Salary Range $17,773/$23,999 annual. Minimum Qualifications: A Bachelors Degree from an accredited college or university, with major work in ornamental horticulture or closely related field. With formal training in plant growth, soils, landscape architecture, fertilizers and pest controls and one year professional experience in landscaping parks maintenance or a closely related field. Fast growing young institution with excellent advancement program and fringe benefits. For information or application contact Charles N. Moody, Director of Physical Plant, University of Nevada, Las Vegas, Las Vegas, Nevada 89154 or phone (702) 739-3281. An Equal Opportunity Employer. 12/81

Golf Course Maintenance Supervisor — For an 18-hole and a 9-hole executive municipal golf course. Excellent benefits, vehicle provided. Salary range — $17,000 to $23,000. Send resume to Jerry Zwolak, Waukegan Park District, P.O. Box 708, Waukegan, IL 60085. 12/81

CORPORATE FIELD REPRESENTATIVE— Responsibilities center around servicing and advising our lawn and tree care franchises in Northern Illinois and Indiana. Within a year or two, there is a possibility of transferring to another city to manage the servicing of our franchises in that area. The ideal candidate will have at least Assistant Branch Manager experience and a good working knowledge of lawn care. A personable manner and well developed communication skills are a must. This is an exceptional opportunity with a young, but prominent, lawn and tree care company which is expanding and growing tremendously. Competitive salary and benefits. Send resume and salary history/requirements to: Spring-Green Lawn Care Corp., P.O. Box 908, Naperville, IL 60566. 12/81

TOP NOTCH CLIMBERS needed. Minimum 3 years rope & saddle experience in first quality residential tree work required. Top pay with established firm. Holcomb Tree Service, P.O. Box 28637, Dallas, TX 75225. (214) 327-9311 12/81

DEALER/REPRESENTATIVES NEEDED for Specialized Lawn-Shrub-Tree Care Products, Equipment, and Marketing and Educational Programs. Write: Green Pro Cooperative Services, 380 S. Franklin Street, Hempstead, NY 11550, Attn. R. Riley or Call (516) 538-6444. 12/81

POSITION WANTED

PARKS SUPERVISOR — available Jan. 1, 1982 — 3 years parks experience, 2 years nursery related work, B.S. in Horticulture. Seeking position with progressive public or private park. Resume and references on request. Reply to Parks, 148 Vine St., Athens, GA 30601. 12/81

WANTED

We are looking for a man or company with extensive irrigation and landscaping experience to move to Tampa, FL. Will consider purchasing company. Write P.O. Box 10828, Tampa, FL 33679 with full details on your company, years of experience, number of employees, etc. 12/81

Wanted Bermuda King PTO Sprig Harvester and PTO driven Sprig Planter — (513) 424-5722. 12/81

AUTHORIZED DEALERS WANTED to sell and distribute Roll'n Grow lawn products seeded grass, flowers, and vegetable mats. (Under new management.) More information call (309) 697-2424 or (309) 674-0250. Write: Roll'n Grow Lawns, 7100 Adams, Bartonville, IL 61607. 12/81

Large Lindig & Royer Soil Shredders, Lewis Equipment Company, 320 Third Street, SW., Winter Haven, Florida 33880. (813) 294-5893.

MISCELLANEOUS

COLLECTIONS A PROBLEM? Try our unique, effective yet inexpensive system. We are so confident that it will work for you that we offer to let you try it free. Satisfaction guaranteed. For details write—Collection, 5 Tuscan Court, Huntington Station, NY 11746. 12/81

KELWAY® SOIL ACIDITY TESTER, used by PROFESSIONALS nationwide. Direct reading, lightweight, portable, fully serviceable, no power source. Model HB-2 reads moisture too. Available through distributors. For brochure contact Kel Instruments Co., Inc., Dept. T. P.O. Box 1869. Clifton, N.J. 07015 (201) 471-3954.

LANDSCAPE DESIGN KIT, 37 rubber symbol stamps, ink pad, $38.50 postpaid. California add $2.16 tax. Stamps kit brochures available. American Stamp Co., Box 741, Dept. WT, Reseda, California 91335. Phone (213) 881-2808. TF

INTERESTED in expanding into **SHRUB & TREE CARE** (insect/disease control and feeding)? Attend our unique four-day **ACADEMY** January 13-16, 1982. Prepares you—just as if you bought into a franchise—to take advantage of big profits waiting for you. Tuition includes **EVERYTHING YOU NEED** to get started, including advertising, promotional pieces, specialized forms and, of course, **BASIC KNOWLEDGE** from several teachers with specialized experience you'll find invaluable. Call **GREEN PRO COOPERATIVE SERVICES** (516) 483-0100 or write to 380 S. Franklin Street, Hempstead, NY 11550. Remember, on-the-job tuition is the most expensive kind. Get it for a very small fee **before** you get on the job. We've already paid for the mistakes. 12/81

NEW BALL BARRIER NETTING: Made of olefin fibers. 6½ feet and 25 feet high. Strong and tough. Will not rust. Easy to handle. For Driving Ranges and Golf Courses. Keep golf balls from straying off-course. J.A. Cissel Co., Inc., Dept. JK, P.O. Box 339, Farmingdale, N.J. 07727. (800) 631-2234. 5/82

CHALLENGING CAREER. Above average pay. Two year associate in applied science degree in golf course operations/Landscape technology. Financial assistance available. Write Western Texas College, Snyder, TX 79549. (915) 573-8511. 2/82

USED EQUIPMENT

Jacobsen 524-100 Self propelled Aerator, Dethatcher, Overseeder. Used 10 hours, Mint condition. WRIGHT Lawn Spray—East Amherst, NY 14051 (716) 741-3336. 12/81

Lyons Green Turf For Sale

1979 Nunes vacuum turf sweeper—$10,000. 7' wide with thatch beater, 13 yard hopper Hi-Boy dump.

1979 Nunes 14 ft. rotary mower, 3 gangs, 3 blades each—$20,000. Mounted on Ford tractor, 420 hrs. use.

1978 Princeton Tow Boy sod harvester, model 4020—$12,000.

1978 Roseman 15 ft. reel mower. 7 gangs, hydraulically driven—$4,000.

1978 Kenworth cab-over tractor. 400 Cumins engine, 13-speed road ranger transmission, 165" wheel base. Only 67,000 miles use—$50,000.

1978 Trailmobile 42 ft. trailer. Aluminum frame, set up to carry spider hyster—$10,000.

1978 spider hyster—$9,000.

(Package of tractor, trailer and hyster—$70,000.)

Brillion grass seeder, 10 ft. wide—$2,500.

Rt. 4, Box 240
Caldwell, ID 83605
(208) 459-7291 12/81

Continues on page 60

WE REACH THE PEOPLE YOU NEED TO REACH!

Place a recruitment ad in any of these HARCOURT BRACE JOVANOVICH PUBLICATIONS - and you know your ad dollar is wisely spent.

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Flooring	22000
Food Management	49963
Hearing Instruments	16592
Home & Auto	22303
Hotel & Motel Management	36023
Housewares	12800

Magazine	Circulation
LP/Gas	13758
Lawn Care Industry	12648
Neurology	12032
Paper Sales	12200
Pest Control	14498
Professional Remodeling	32995
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Rent All	11139
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Don't forget that classified advertising works just as effectively in locating employees as it does if you are looking for a position, have a line, machinery or a business to sell, are seeking representatives or wish to buy a specific item. Let it go to work for you!

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HBJ

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Call Dawn Anderson at 218-727-8511

Classifieds *from page 58*

7 gang Brouwer PTO Mower. Excellent, used 2 seasons $5000; 7 Jacobsen Blitzer mowers, solid rubber—5—10" blades, excellent shape $350 each, 1 Robark net setter with 10 rolls net, used on 40 acres, $4000 or $5500 with net—would consider trade above items for irrigation pipe. Selstad's—(406) 452-5158. 12/81

FOR SALE—GRASSHOPPER RIDER MOWER —44 INCH CUT W/HI VAC—150 HOURS, GOOD CONDITION $2,000.00. WALNUT CREEK LANDSCAPE, SAN DIMAS, CA. (714) 592-1435. 12/81

For Sale 4-Towable Forklifts

1974 Champ 4000 lbs.	$10,000
1974 Liftall 4000 lbs.	$11,000
1974 Backer York 5000 lbs.	$ 9,500
1974 Backer York 6000 lbs.	$ 8,700

All in very good condition
Clark & Sons, N. 7624 Market St.,
Spokane, WA 99207 (509) 487-2737
12/81

HI-RANGER BUCKET TRUCKS, 54′ and 51′, Flatbed and chip box mitts - Merrill brush chipper. Allied Enterprises, Inc., W. 204 N. 11509 Goldendale Rd., Germantown, WI 53022, (414) 255-6161 anytime. TF

BUCKET TRUCKS, SPRAYERS, MIST Blowers Chippers, Log Splitters, Stump Grinders. Largest selection of reconditioned arborist equipment in the Northeast. Call or write with your needs. **ESSCO,** 584 **WEST HOFFMAN AVENUE, LINDENHURST, N.Y.** 11757. (516) 226-5115. 3/82

USED GOLF CARS FOR SALE—All makes and models, 3 & 4 wheel, electric or gas. If we don't have your choice in stock we can get it. Transportation available. Mid-Atlantic Equipment Corp., Collegeville, PA. Call Now! (215) 489-1400. TF

L20 LINDIG SOIL SHREDDER: with 35 hp Wisconsin engine and rotary screener—demonstrator, used less than 5 hours. Current price approx. $16,000. Special price F.O.B. West Henrietta, N.Y. $11,500. S.V. Moffett Co., Inc. (716) 334-0100. 1/82

For Sale: Brouwer Sod Harvester, 18 inch roll, mounted on M.F. 135 diesel tractor. good condition. Brillion Turf Maker 10 foot seeder, micro seed feature, very good condition. IHC 4500B diesel forklift—6000 lb. capacity. Power shift, 21 foot mast, side shift, differential lock. Phone or write: C & D Equipment Co., 4166 North 126th St., Brookfield, Wis. 53005. (414) 781-1522. 12/81

Two (2) 1980 Spyder Forklifts, one Kohler, one Onan, both have fork extenders, new tires, in use daily, $12,495 each, or both for $24,000. The Grass Patch, Inc., 10743 Research Blvd., Austin, TX 78759. (512) 346-2150. 2/82

Model 10 stump cutter. Excellent condition—new in 1976. $5,500.00. Marrs Tree Service, Shawnee, KS (913) 268-7932. 12/81

1970 Hi-Ranger, 57 foot on International 1600—$14,000. Ford 8N tractor with front end loader—$3,150. McGinty Bros., Inc., Route 2, Box 518, Long Grove, IL 60047. (312) 438-5161. 12/81

Backhoe mounted on 1974 International pickup 4x4 dual wheels, 36,000 miles, new paint. Digs 8 feet deep. Excellent condition. $6,000. Richard Trapasso, Kew Gardens, NY. (212) 849-9008. 12/81

HI-RANGERS AERIAL BASKETS 65′, 57′, and 53′. Skyworkers aerial baskets 65′, 50′, 40′. Vermeer stump cutter 1560,6. Vermeer tree spade 66, TS 44. Asplundh bucket and brush chippers. Bean sprayer, 9 ton trailer. Parkway Tree Service, 12026 W. Cherry, Wauwatosa, Wisc. 53226. (414) 257-1555. TF

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"GARDEN TIPS"—Prepare now to increase next year's profits. "Garden Tips" the monthly customer newsletter, with your company name/phone. Proven response . . . cements customer relations, gets them to spend more, opens new doors expertly in new expansion areas. Low cost, effective profit building. Call today (516) 483-0100. We'll send complete information. Or write Green Pro Cooperative Services, 380 S. Franklin Street, Hempstead, NY 11550. 12/81

WANT TO BUY OR SELL a golf course? Exclusively golf course transactions and appraisals. Ask for our catalog. McKay Golf and Country Club Properties, 15553 N. East Street, Lansing, Michigan 48906. Phone (517) 484-7726. TF

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FOR SALE

Used Spray Trucks—Chevy, 700-gallon tanks. Automatic hose reels, mechanical agitation. Call Ron Wilson, (513) 845-0517. 12/81

Completely overhauled and dielectrically insulated 45′ Sky-Workers—For Sale and Rent. 90 day guarantee on sales. Call Aerial Lift, Inc., Milford, Conn. (203) 878-0694. TF

LAWN SEED. Wholesale. Full line of top quality grasses. Improved bluegrass varieties, fine fescues and fine bladed ryegrasses. We specialize in custom mixing. Oliger Seed Company, 2705 Wingate Avenue, Akron, Ohio 44314. Call collect (216) 753-2259. 1/82

SKYWORKER AERIAL BUCKETS: Sales, Parts and Service. New and used units available to 65 feet. New and Used brush chippers, Hydro Ax's, used stumpers, sprayers and digger derricks also available. Call or write P. C. GOULD SALES COMPANY, Plains Road, Essex, Conn. 06426. (203) 767-1636. 12/81

Western Colorado Tree Service. Established 23 years, part of large booming area with great potential. Operates year round. (303) 625-3481. 1/81

1 used 1978 Princeton self-propelled sod harvester. Model 4816, completely overhauled. Replacement cost over $45,000. Willing to sacrifice for $20,000. Cash offer. Contact Eleanor at Circle Leasing of Florida Corp., 1410 N. Westshore Blvd., Suite 803, Tampa, FL 33607. (813) 870-1071. 12/81

Steady cash flow, Retail Nursery and Landscaping Business, located on main thruway. Over 200,000 Value on Nursery stock. 2 trucks and miscellaneous equipment. Price $150,000. New Port Richey, Florida. Home (813) 842-3207, Business (813) 842-6851. 12/81

TM

ADVERTISERS

Reader Inquiry No.		Page No.
100	Andersons	59
101	BFC Chemicals	27
102	Bowie Industries	40
103	Brouwer Turf Equipment Ltd.	49
104	Bundy Manufacturing Co.	29
105	Cushman	13
106	Cushman	34-35
107	Deere, John	45
108	Diamond Shamrock/AG Chem.	41-43
109	Excell Industries	50
110	Excell Industries	16
111	Green Pro Cooperative Services	56
112	Harley-Davidson Motor Co., Inc.	3
113	Hoffco, Inc.	1
114	International Seeds	CV-3
115	Jacobsen	19
116	Laval Corp., Claude	28
117	Lofts Seed Co.	CV-4
118	Lofts Seed Co.	CV-4
119	Mallinckrodt Inc.	46
120	Mathews Co.	47
121	Milwaukee Metro Sewerage District	33
122	Mobile Aerial Towers, Inc.	17
123	Mott Corp.	47
124	Northrup King	25
125	Pennfine	32
126	Pennfine	53
127	Pennfine	57
128	Rhone Poulenc Inc.	38-39
129	Rhone Poulenc Inc.	54-55
130	Rohm and Haas	30
131	Ryan Turf-Care Equipment	5
132	Stanley Hydraulic Tools	4
133	Tee-2-Green Corp.	7
134	Tennant Co.	48
135	Toro Co.	15
136	Toro Co.—Irrigation Division	23
137	Tuco Agricultural Chemical	CV-2
138	Velsicol Chemical Corp.	14
139	Warren's Turff Nursery, Inc.	24

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All premium ryegrasses aren't alike. Here's the Regal difference

While a select few turf-type perennial ryegrasses are rated as "premium" varieties, Regal is a standout on several counts.

For example, Regal is one of the darkest of all ryegrasses. That's why it is often mixed with the improved bluegrasses and fine fescues to produce a rich, uniform turf.

Most turf experts agree that Regal has better heat and humidity tolerance than any other turf-type perennial ryegrass. It was the best in this regard in trials at Beltsville, Maryland and Arkansas.

Regal also demonstrates good overall disease-resistance to the major ryegrass diseases as well as the numerous diseases which often plague some bluegrass varieties.

To top it off, Regal germinates in a matter of 5-7 days, quickly develops a strong root system and holds its color during the chill days of winter.

Regal — it's the turf-type perennial ryegrass that's different.

P.V.P. Application No. 7700110

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Circle No. 114 on Reader Inquiry Card

REGAL

The Palmer Overseeding Method

Arnold Palmer and Jim Ellison, Bay Hill's Superintendent, are very careful when choosing an overseeding mixture. Some of the world's top golfers have played at Bay Hill in Orlando, and they've come to expect certain standards.

To help maintain the Bay Hill image, Palmer and Ellison use Marvelgreen. And so do some other prestigious courses:

- Fairfield Harbor Country Club, NC
- Hounds Lake Golf Course, SC
- Port Royal Golf Course, SC
- Augusta Country Club, GA
- Jekyll Island Golf Course, GA
- Marshwood at the Landings, GA
- Amelia Island Plantation Golf Course, FL
- Killearn Estates Golf Course, FL
- St. Andrews of the Gulf, MS
- Eden Isle Country Club, LA

Marvelgreen is also being used at the TPA TOUR Tournament Players Club, Ponte Vedra Beach, FL, Allan MacCurrach, Agronomist; Dave Postlethwait, Superintendent.

TPA TOUR

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